May 1961

SCHOOL MANAGEMENT

PRACTICAL SOLUTIONS TO SCHOOL MANAGEMENT PROBLEMS

HOW TO SUPERVISE YOUR PRINCIPALS

HOW TO DOUBLE OR TRIPLE YOUR READING SPEED

Getting away from the rectangular classroom

TRENDS

Start training engineers in high school

SEE COMPLETE CONTENTS ON PAGE 2



Another Improvement First

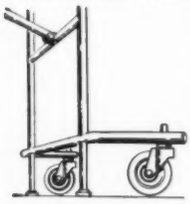
In Benchless Roll-Away Folding Tables

NEW LOK-STEADY LEG DESIGN GIVES ROCK-LIKE STABILITY TO TABLES... AUTOMATICALLY!

Gentlemen: It was my pleasure to announce to you a short time ago our new Uniframe method of construction. This development was enthusiastically received, and some of our competitors immediately paid us a supreme compliment, imitation.

Now I am pleased to bring to your attention another new improvement, Lok-Steady leg construction. Our first application of this new technique has been on our benchless roll-away folding tables.

You may be familiar with the fact that previously there was one serious difficulty with roll-away folding tables—even after unfolding, they tended to "roll-away." This was because the wheel-equipped legs were designed to rest on their wheels after unfolding. Rolling was inevitable. With Lok-Steady construction, this problem is eliminated forever.



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Just a final word about Lok-Steady leg construction: It is exceedingly simple, requires no maintenance of any kind, and is entirely automatic. And both the folding and unfolding can be handled by students because we have also incorporated powerful torsion bars into the folding mechanism.

These tables are finished with beautiful plastic tops and bright-plated metal parts, for a lifetime of satisfactory use.

Yet, I am happy to report, Smith System benchless roll-away folding tables are a most economical purchase. Economical in terms of first cost, and in terms of useful life. When you compare them to any others now available, you will find that you simply cannot make a wiser choice.

If you would like additional information about these remarkable new tables, we will be pleased to have a representative call—or send you literature. Of course there is absolutely no obligation. Why not write us today!



UNIFRAME construction uses techniques developed in aircraft manufacture. With it, working surfaces of tables, etc., are not used for structural support – the welded tubular steel frame will actually stand by itself! This means the frame absorbs stresses, does not transmit them to points of attachment. Insures longer table life, more stability in use.

Yours sincerely,
Newell V. Risdall, *Sales Manager*



Smith System

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Electronics Park, Syracuse, New York

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POSITION_____

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SM-5

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SCHOOL MANAGEMENT

May 1961

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How to supervise your principals 68

A principal should be neither a superintendent's errand boy nor an absolute monarch. Here's how one district supervises its principals—without taking away authority or independence.

How to double or triple your reading speed 73

Here's the first of three articles showing how to break old habits and reduce your reading time. This article explains how to use phrasing and eye focus for self-improvement.

Where do administrators come from? 76

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How not to present a new contract to teachers 79

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Getting away from the rectangular classroom—II 82

Conventional classrooms are not necessarily ideal, says one architect. His point is being made by an elementary school in Tinicum, Pa. Its seven classrooms are triangular.

How to start training engineers in high school 87

The second report of trends in educational facilities *discusses industrial arts and home economics and comes in close on one exciting new program.*

Of suits & zones & teachers' moans 108

A former superintendent takes a new look at his old job, and suggests that some of the most vexing problems may have had their lighter sides.

Editor: Paul Abramson; **Feature Editor:** Peter S. Calisch; **News Editor:** Bernard E. Weiss; **Art Director:** Laurence Lustig; **Production Manager:** Virginia E. Ray; **Art Production Manager:** Joan Longnecker; **Copy Editor:** Mary Kring; **Production Assistant:** Elaine Lesta; **Associates:** Dr. Orlando F. Furno, *Educational Research;* Richard Flambert, *Food Service;* Dr. Stephen F. Roach, *School Law;* **Circulation:** James Vinisko, *Supervisor;* Marie LaGuardia.

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Include old address as it appeared on previous issues (if possible send label from magazine). Do not depend on the post office to forward either the change of address or your magazines.

The devil can quote scriptures . . .

Here you see reproduced an editorial in the respected and influential *Detroit Free Press*. The statistics quoted are accurate. The conclusion reached is, quite obviously, less than accurate.

And All Done Right at Home

A SURVEY of school construction completed in 1960, claimed by the maker to be the most accurate ever made, knocks down the claim of Federal aid proponents that local school districts lack ability to build classrooms.

School Management Magazines, Inc., in a detailed study of 10,547 of the Nation's 12,343 school districts that have more than 300 pupils, found that 1,819 new schools and 2,137 additions were built last year. They provided space for 1,465,635 new students.

School districts in Michigan alone built 121 new schools and 101 additions, thus providing for 92,229 additional students.

Further indicating that local school districts are not desperate for classrooms was a breakdown of the special purpose areas included in the national totals. These included the following:

Gymnasiums	**1,224**
Cafeterias	**1,625**
Auditoriums	**764**
Science labs.	**966**
Home economics	**783**
Shops	**806**
Language labs.	**82**
Music rooms	**240**

If local citizens can provide such facilities, the shouted-about need for an infusion of the same taxpayers' money under Federal guise and control appears tremendously overplayed.

Consider this: When school opened last September, the State of Michigan was short 10,762 classrooms. Of these, 1,931 classrooms (capacity 54,075) were needed to accommodate pupils in overcrowded and double-sessions schools. Still another 8,831 classrooms (capacity 265,000) were needed to replace unsatisfactory or substandard facilities.

Paradoxically, Michigan is a dramatic example of how difficult it is for some states to maintain a proper educational standard. As shown by the Cost of Education Index, Michigan ranks 17th among the states in "Local Effort" to provide a good program. Michigan's Effort Index is 1.11, compared to a national median of only .92. But Michigan ranks only 32nd in net current expenditures per pupil unit. It spends $270 per pupil. The national median is $304.

So, in spite of an heroic local effort, Michigan is below the national "par"—and the national "par" is a far cry from real excellence.

We hope the Free Press picks up this information, too, but we aren't optimistic.

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¶ Let us help your efforts to make school properties more presentable. Since 1934, FULLER BRUSH has been working on school maintenance problems . . . working to develop new, improved products and equipment that will clean your schools more economically and thoroughly. ¶ FULLER BRUSH offers you a complete line of the most advanced maintenance cleaning supplies for the modern school. Invite us to submit without obligation our bid on your forthcoming schedule of custodial items.

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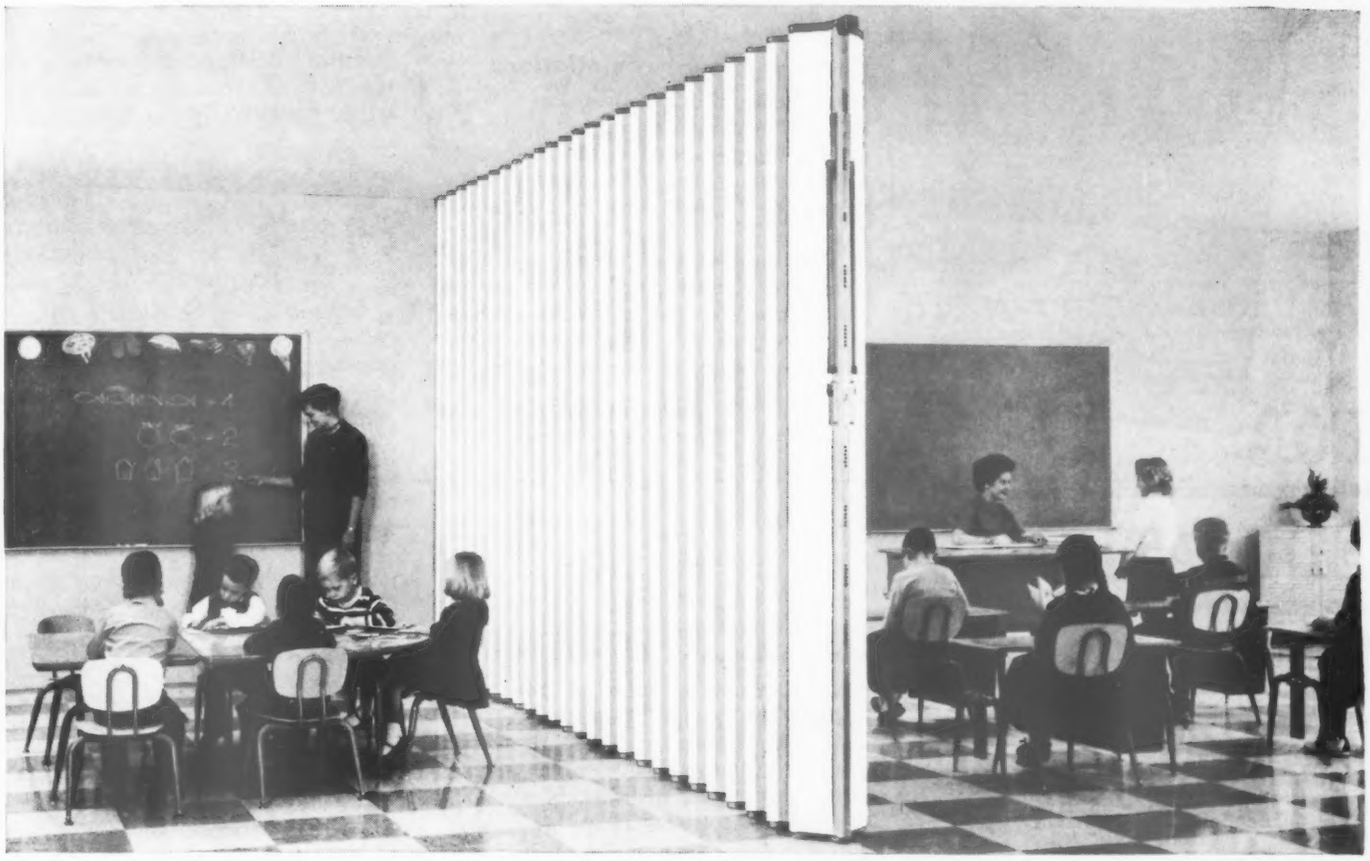
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New! Steel-Walled Modernfold

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The heart of Modernfold's sound superiority is in twin walls of steel panels beneath that luxurious vinyl . . . a dense, rigid barrier with eight sound-stopping horizontal edge seals custom-trimmed to the opening.

But this five decibel lead in sound control is only half the story. Because no other partition in the industry matches Modernfold heavy-duty construction. The chart at the right shows you why . . . comparing Modernfold's Soundmaster 240 with the *best* model offered by each of the next largest manufacturers.

Partition	"240"	"A"	"B"	"C"
*Sound Reduction 125/4000 cps av.	37.4	32.4	31.8	27.9
354/4000 cps av. (Industry Standard)	41.8	35.8	36.4	33.0
Acoustic Panels	steel 5⅜" wide, wt. 1 lb./sq. ft.	uses cardboard	steel, 2¾" wide, wt. ½ lb./sq. ft.	uses cardboard
Sealer Strips	8	8	4	4
Foam-Lined Jamb-Seal	yes	yes	no	no
Air Release	yes	no	no	no
Pull-In Latch	yes	yes	no	no
Best Fabric Weight—Outside Covering Only	45 oz. per lin. yd.	45 oz. per lin. yd.	18 oz. per lin. yd.	27 oz. per lin. yd.
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Gentlemen: Please send full information on Soundmaster 240.

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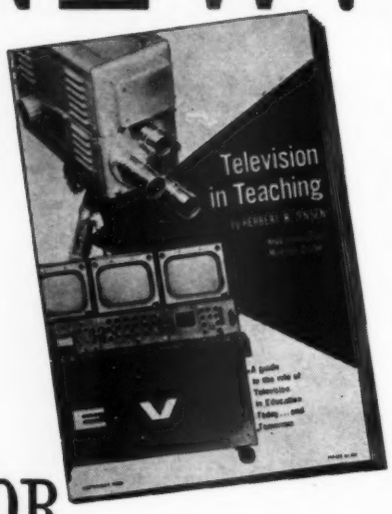
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"Television in Teaching"
by Dr. Herbert R. Jensen, Supervisor, Instructional Materials Center Public Schools, Greenwich, Conn.

Published for administrators, school boards and teachers by DAGE/TRW . . . pioneer in electronic equipment and tested techniques for education.

This valuable 28-page book explores television's unique potential for improving educational productivity and communication efficiency.

Of particular interest are 17 conclusions covering fundamental pedagogic and operational considerations. Drawn from actual experience and research, they are logical guidelines to the detailed organization and planning steps within a framework of a school's needs, goals and finances.

For a copy of "Television in Teaching," and a list of other DAGE/TRW Educational Television publications, write, wire or phone today.

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[redacted]

A sampling of correspondence across the editor's desk.

Very important compilations

SIR: On behalf of the President, I want to thank you for sending him a copy of the January 1961 issue of SCHOOL MANAGEMENT magazine, which contained the 1960-61 Cost of Education Index.

These are very important compilations, and they will be of great use to the members of the staff at the White House working on educational policy.

With every good wish and thanks.

FREDERICK L. HOLBORN
ADMINISTRATIVE ASSISTANT
TO THE PRESIDENT
THE WHITE HOUSE
WASHINGTON, D. C.

Most helpful

SIR: Dr. Paul R. Mort of Teacher's College, Columbia University, whose work you quote, has recently completed a rather extensive survey of our Delaware school districts. Since Dr. Mort's work in Delaware and your comprehensive report on a national basis use similar criteria for evaluation, your publication should be most helpful to us in making local comparisons.

ELBERT N. CARVEL
GOVERNOR
STATE OF DELAWARE
DOVER, DEL.

Disturbed

SIR: I was disturbed to read "Can all of our states support good schools" (*see SM, Feb. '61, page 16*). It mentions the amount of state and local tax collections per $100 of personal income and makes a good argument for federal aid to education. What is of much more importance, however, is that the article does not mention the amount of federal tax collections per $100 of personal income. Looking at my own situation, I am sure that the federal tax would equal the total of the taxes of several states and local districts. It is through such sly, insidious, not-too-truthful propaganda that the proponents of federal aid to education and proponents of all other types of socialism are spraying their venom. It is disturbing to read an article like this in your magazine.

R. K. ARNETT, M.D.
PRESIDENT
BOARD OF EDUCATION
LUFKIN, TEX.

■ *As stated in the editor's note preceding the February article, our editors were aware that the article was based on material prepared by an organization that supports federal aid to education. As was also stated, "it [was] not our intention in presenting this material to take sides in the matter. We [did], however, hope to present some facts and figures on past, present and future support of the public schools that will serve as a basis for constructive discussion of the problem."* ED.

Community colleges

SIR: Congratulations on your article "A new challenge for local school boards" (*see SM, Feb. '61, page 37*). As president of our 14-district school board association, I would report we have been working on the subject for over a year. Thank you again for articles so well done.

LLOYD T. MORRIS
MEMBER
BOARD OF EDUCATION
ELMWOOD PARK, ILL.

Bully for controversy

SIR: In response to your invitation for reaction to your recent CBE article (*see "An interview with the Council for Basic Education, SM, Dec. '60*), as a school board member, not an educationist, I say bully for you!

Your attitude toward CBE reminds me of another "professional" journal's attitude in a similar situation which was not as enlightened as yours. In the years immediately after World War I, it was heresy for the editors of the *Electric Railway Journal* to mention automotive buses. They conducted their publication as if buses did not exist.

Well, we all know what has since

text continued on page 10

A new gym finish so superior it carries a bonded guarantee

West announces Nevamar, the new resin finish guaranteed to outlast the product you now use

New Nevamar is one of the latest research developments in polymer chemistry. It offers these unique time and labor-saving properties:

The gloss is not just a surface gloss; it goes all the way *through* the finish. Dirt and grime cannot penetrate it, cause it to dull, darken, or fade.

In heavy traffic, it requires no more maintenance than occasional sweeping.

It is markedly superior to other quality finishes in its ability to laugh off rubber burns and scuffs.

Nevamar is very easy to apply. It dries dust free in 1 hour; tack free in 6.

An unprecedented bonded guarantee

West Chemical Products guarantees Nevamar will produce a more durable finish than the product you now use. Every user gets a bonded guarantee, in writing:

If, after following the simple recommendations for application and maintenance, your gym finish does not last longer than the previous product used—or should require additional finish coats within 1 year – West will replace the original amount of material, at no charge.

For an eye-opening demonstration of Nevamar finish and its companion sealer (there's a superior line-marking enamel, too) contact your local West representative or mail coupon to: West Chemical Products, Inc., 42-16 West Street, Long Island City 1, New York.

WEST CHEMICAL PRODUCTS INC.

"Nevamar" is a Registered Trade Mark of West Chemical Products, Inc.

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West Chemical Products, Inc.,
42-16 West Street, Long Island City 1, New York

Gentlemen:

Please ☐ send me further information on Nevamar
☐ have your representative call.

Name_____

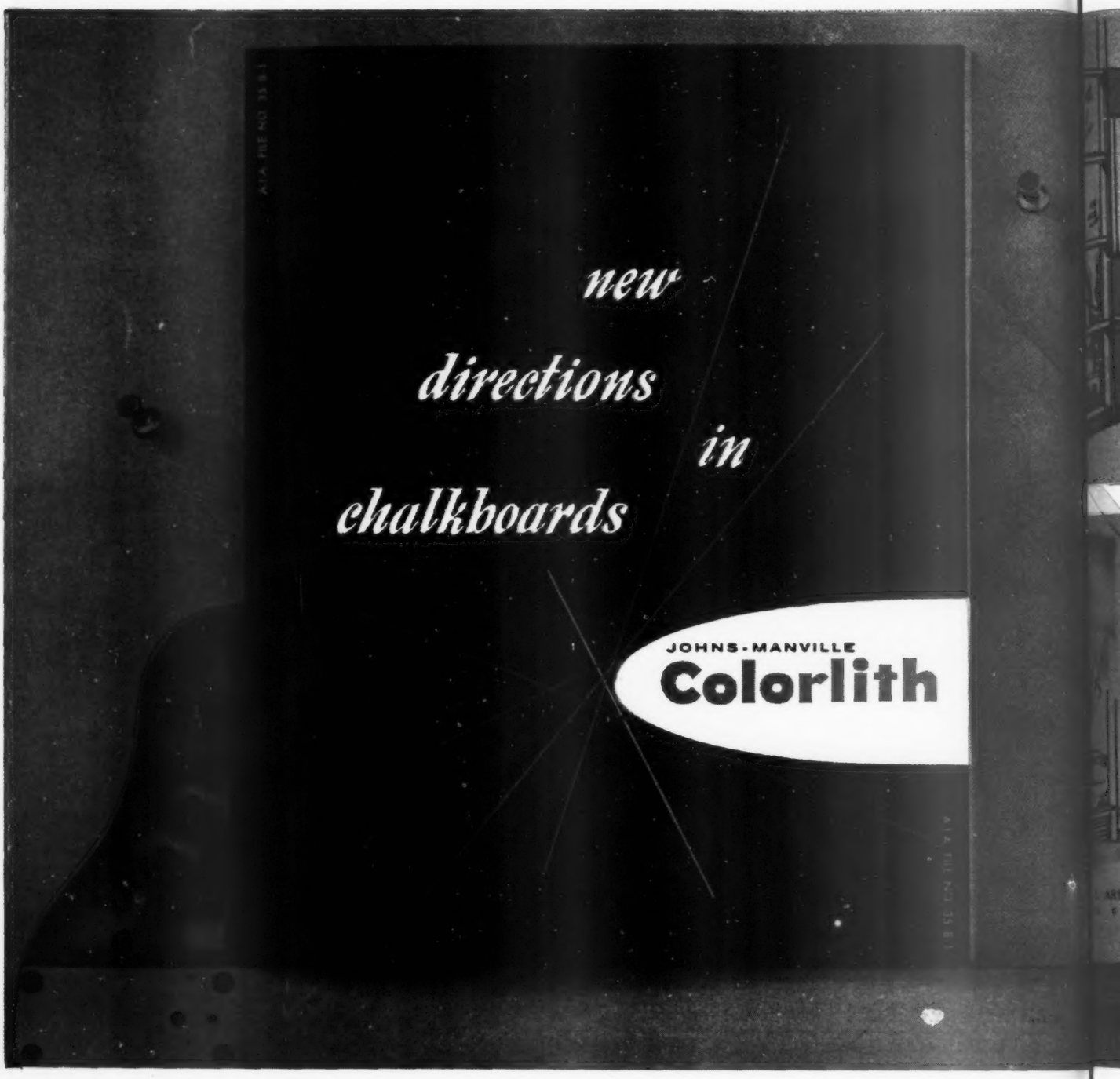
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New chalkboard idea booklet shows advanced classroom de

STRONG, DURABLE PANELS IN FOUR INTEGRAL COLORS PROVIDE SMOOTH WRITING SURFACE AND HIGH VISUAL CONTRAST

Your imagination can lead to exciting new ideas in classroom design when you use J-M Colorlith chalkboard. This versatile and unusual asbestos-cement material makes possible many novel construction features . . . such as partitions, doors, wardrobe panels, movable storage units, convertible and easel-reversible units. Yet for all its structural strength and integral color, J-M Colorlith costs less than other quality boards!

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Shown here are excerpts from "New Directions in Chalkboards," a colorful, 16-page brochure containing many exciting chalkboard designs especially created for Johns-Manville by Peter Schladermundt Associates, noted industrial designers.

Detailed schematics show how Colorlith can be installed with or without trim, combined with tackboard, using snap-on chalk trays, and in many other ways. Just fill out the coupon below for your free copy of this instructive brochure.

designs made possible by J-M COLORLITH®

and install. No special wall treatment is required.

Colorlith offers good "tooth" without "drag," so chalk glides smoothly over the surface in a full, unbroken line of greater intensity. Colorlith chalkboards are easy to clean, and because their background is clear and dark, erasure leaves no "ghosts." Boards require no chalking-in. In any of its colors, Colorlith meets "American Standard Practice for Schools" reflectance recommendations of AIA and the Illuminating Engineering Society. For details mail coupon. In Canada, address Canadian Johns-Manville, Ltd., Port Credit, Ontario. Cable address: Johnmanvil.

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Please send me J-M Brochure IN-295A, "New Directions in Chalkboards."

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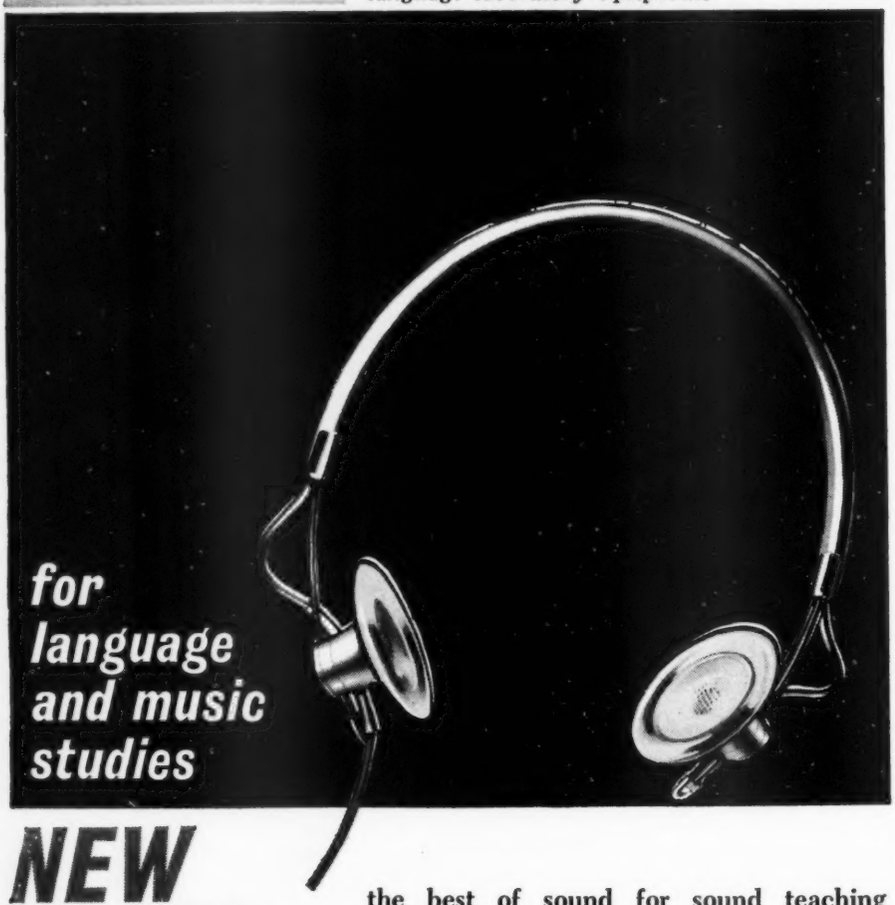
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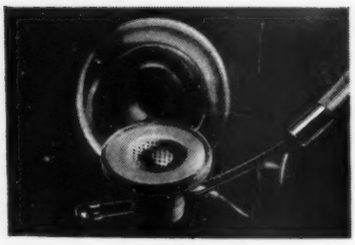
NEW A-250 high-fidelity headsets

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Language laboratory and music students hear every sound, every inflection and tone . . . *total* sound for most effective learning. *The A-250 has a guaranteed frequency range of 30-20,000 cps!*

Here is unequalled comfort, too, combining a feather-light 3 ounces with a totally new sound transmission principle that eliminates the need for tight coupling to the ear.

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The A-250 is the newest addition to MRI/TRW's comprehensive line of quality, easy-to-use Language Laboratory equipment, proven in daily use in over 1000 school installations. An integral part of MRI/TRW's complete services—of major importance to teachers—is a continuing program of tested in-classroom techniques, regional seminars and local consultation, assuring maximum teaching effectiveness and utilization of equipment.

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happened, in general, to the trolley-car business.

VICTOR G. GOUGH
SCHOOL BOARD MEMBER
WEST HEMPSTEAD, N. Y.

As Voltaire said . . .

SIR: Thank you for your interview with representatives of the Council for Basic Education.

Although I heartily disagree with the position taken by this organization, I resent the attempt to categorize it as an "enemy of education."

The CBE undoubtedly does add to the burden of teachers and administrators across this country, but unless evidence can be produced to the contrary, it must be assumed that CBE members are motivated by a genuine concern for education in this country today.

To arbitrarily classify any group that holds ideas contradictory to one's own as an "enemy of education" is not only prejudiced, it's foolish.

I feel that the position taken by CBE on many issues can be refuted by most of this country's professional educators who recognize that the different points of view arise largely out of different starting points in basic educational philosophies.

SAUL LAVISKY
DIRECTOR OF PUBLIC INFORMATION
COLUMBIA, S. C.

Print the critics

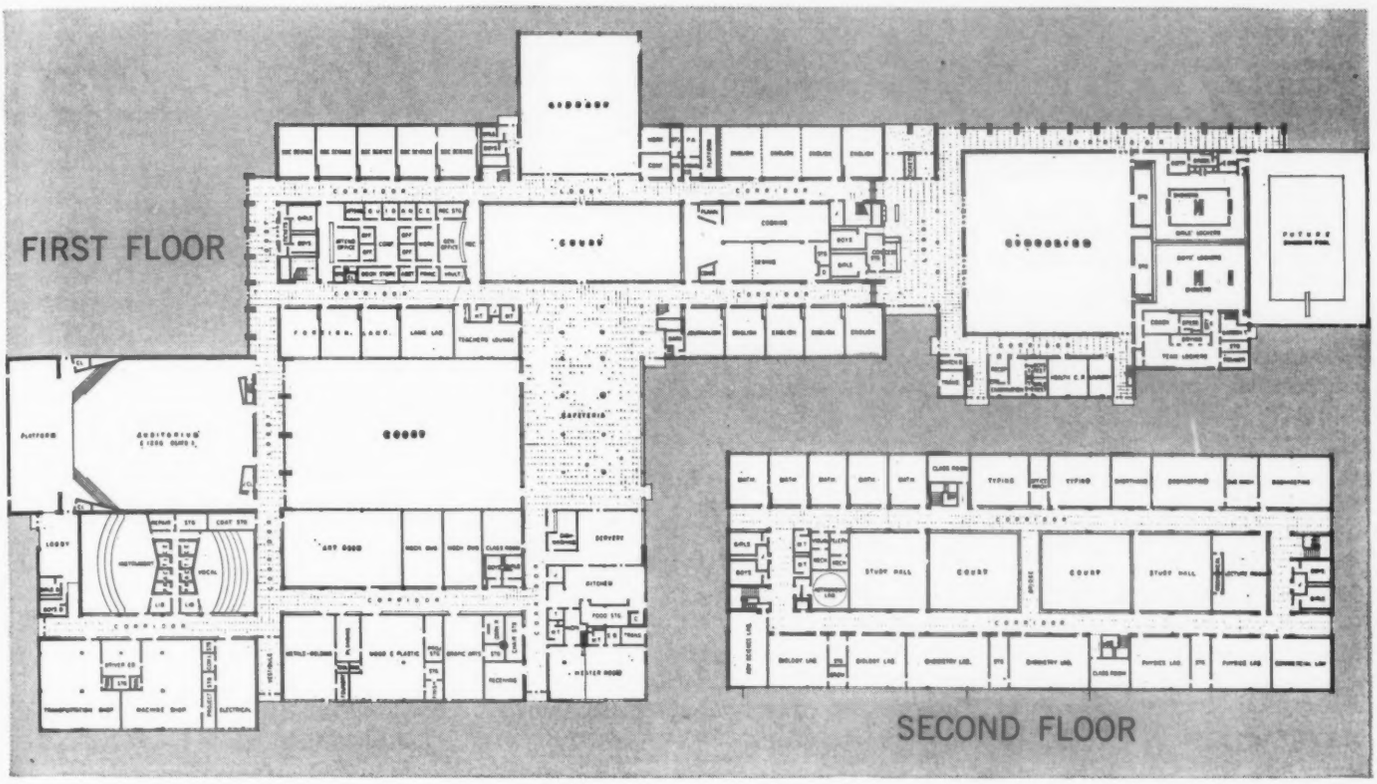
SIR: Certainly you should print ideas presented by the critics of education. One of our most important objectives as educators is to teach critical thinking. Critical thinking necessitates an understanding of the entire issue (which includes extreme viewpoints).

While I am writing, let me add our appreciation of your magazine in general. The school board members receive it and, more important, read it.

BERNARD HUGHES
SUPERINTENDENT
HUNTLEY PROJECT PUBLIC SCHOOLS
WORDEN, MONT.

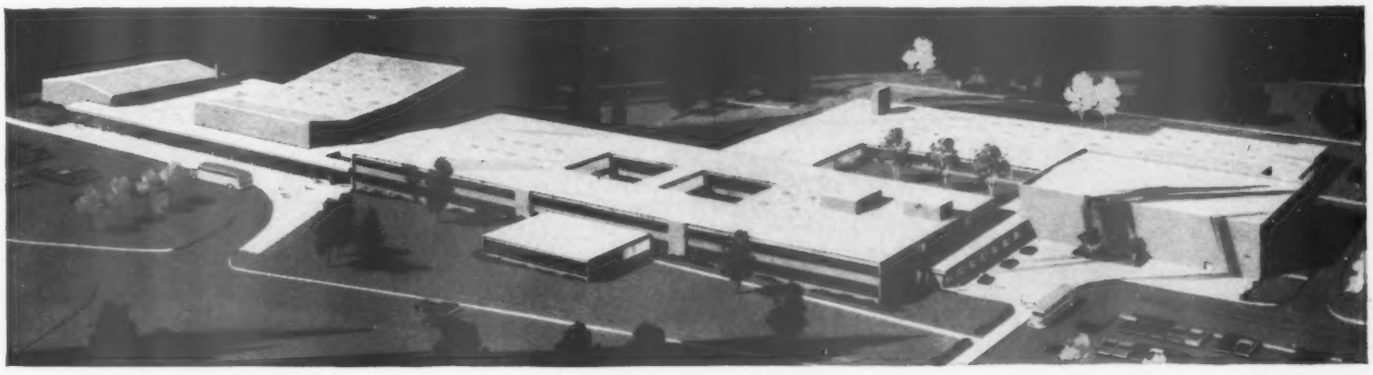
"Salvaged" by the bell

SIR: I think that SCHOOL MANAGEMENT owes an apology to Mr. Bledsoe of the Council for Basic Education for printing without editorial comment the denunciation of him by Superintendent Wilson of Highland Park, Ill. *(See SM, Feb. '61, page 5.)* Wilson charges Bledsoe with ignorance of English because Mr. Bledsoe used the phrase "salvageable students" instead



AT PARMA... the size and scope of the new Valley Forge High School put special emphasis on the need for an efficient Time Control and Program system, free of operational and maintenance problems. This lead to the selection of Stromberg timing. Dependably correct clocks and signals are assured by the precision Master Time Control. This modern time system operates from ordinary lighting circuits. Complete uniformity of time is maintained by supervisory pulses each hour and every 12 hours over a control circuit. Stromberg maintains installation and maintenance service throughout the U.S.A.

A complete catalog — TIME AND SIGNAL EQUIPMENT — prepared for Architects and Engineers — is yours for the asking.



PLANNING THE NEW SCHOOL

A population explosion at Parma, Ohio completely overtaxed secondary school facilities. Rather than expand the old school, construction of the new Valley Forge High School was started in May of 1960 and scheduled for completion in advance of the school year beginning September 1961 at a completed cost of $4,000,000. The new structures — containing 70 classrooms, adequate library, science, language, shop and music facilities, as well as an ample auditorium, cafeteria and gymnasium — is planned to accommodate 2,000 students. Despite these impressive new facilities, plans are now being made for a third secondary school.

The Parma Public Schools, Mr. Paul W. Briggs, Superintendent — were advised in their choice and installation of Time Controls by:

Fulton, Dela Motte, Larson, Nassau & Associates—Architects
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SHOWER ROOM AND SWIMMING POOL: Resilient BEAR PADS get right in and clean the grout between tiles. Slippery scum and body oils disappear fast and surely. And, no rustable particles to stain.

CAFETERIA: Forget what kind of floor; but, remember: BEAR Pads are non-toxic and *completely* washable to assure sanitary conditions.

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GYM: With BEAR Pads, wet scrub before re-coating, dry burnish between finish coats. Bringing up the luster is easy too.

WHY ARE BEAR PADS SO MUCH BETTER?

Because they are impregnated through and through with a thorough and safe cleaning agent; because the pads are securely and accurately centered (you can "heel" and the pad won't spin off). Because they are thick-cushioned and resilient; they get into the tiniest cracks and crevices. Fine, Medium or Coarse, there's a BEAR Floor Pad to do the right floor job for you.











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of "salvable students." According to our standard *Merriam-Webster International Dictionary*, "salvageable students" is correct. The phrase "salvable students" is also correct. Prissy people use "salvable" because it is more hoity-toity. I think Mr. Bledsoe should be praised for using clear, salty English. *Salvageable* suggests ships and turbulent seas; *salvable* suggests ointments and sterile, antiseptic doctor's offices.

EDWARD A. TENNY
PROFESSOR OF ENGLISH
INDIANA STATE TEACHERS COLLEGE
TERRE HAUTE, IND.

■ *Frankly, we didn't feel that Mr. Bledsoe needed any help in defending himself, but we are glad that someone has found his position salvageable, though others may think neither he nor the Council for Basic Education are salvable. All we can add is the thought that anything worth saving can be saved, or salvaged, or found salvageable, salvable or what have you. In any case, see below.* ED.

CBE replies

SIR: May I respond briefly to some of the compliments paid to the Council for Basic Education in your letter column? *(See SM, Feb. '61, page 5.)*

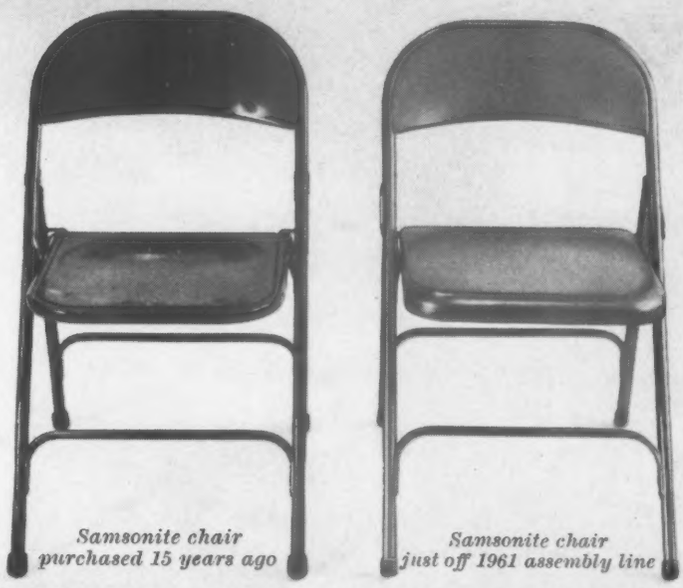
Charles H. Wilson's determination to prevent the council from revising the dictionary, 1915 style, has apparently prevented him from consulting this reference work very carefully. Webster's *New International*, Second Edition, defines *salvageable* as "worthy or capable of being saved," which is exactly what I meant.

I would like to assure Fred M. King that the interview does fairly represent the views of the council's members, and at the same time to compliment the editor on his skill in reducing a three-hour interview to an extremely fair and representative summary. I am interested that Mr. King regards our statements as both unintelligent and uninformed; however, some specific illustrations of inaccuracies on our part might have been more useful.

Ellsworth Tompkins is right that terming the NASSP an "NEA subsidiary" is not exact terminology; on the other hand, there is, unfortunately, no word which precisely describes the relationships of organizations which, while legally separate, occupy the same quarters, cultivate the same vineyards, and regularly take the same stands.

Mr. Tompkins also writes that "life adjustment education . . . has been dead, lo, these many years." It is indeed true that this term is no longer popular among those who once celebrated it,

Samsonite CHAIR BUYER'S GUIDE



Samsonite chair purchased 15 years ago

Samsonite chair just off 1961 assembly line

HOW LONG SHOULD A FOLDING CHAIR LAST?

The chair on the left was one of the first made by Samsonite—bought in 1946 by American Legion Post 190, Detroit, Mich.

After 15 years of use at meetings, dinners, etc., this chair (with 299 others by Samsonite) is *still* used, still sturdy, still comfortable. What is Samsonite's big secret?

Electrically welded tube steel. Arched cross braces. *Bonderizing* for rust resistance.

These chairs are engineered for years of service. How many years? Ask Legion Post 190. Though one of their original 300 chairs needed a minor adjustment, they haven't had to replace a Samsonite chair yet.

Find it Fast in The Yellow Pages

For church, school, club, other group seating information, see your Yellow Pages or write: Shwayder Bros., Institutional Seating Division, Dept. SM-51, Detroit 29, Michigan.

Samsonite
FOLDING CHAIRS

(Circle number 765 for more information)

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Eliminates the hazards of wet, slippery floors. Afford unequaled resistance to wear. Resilient, they silence footsteps.





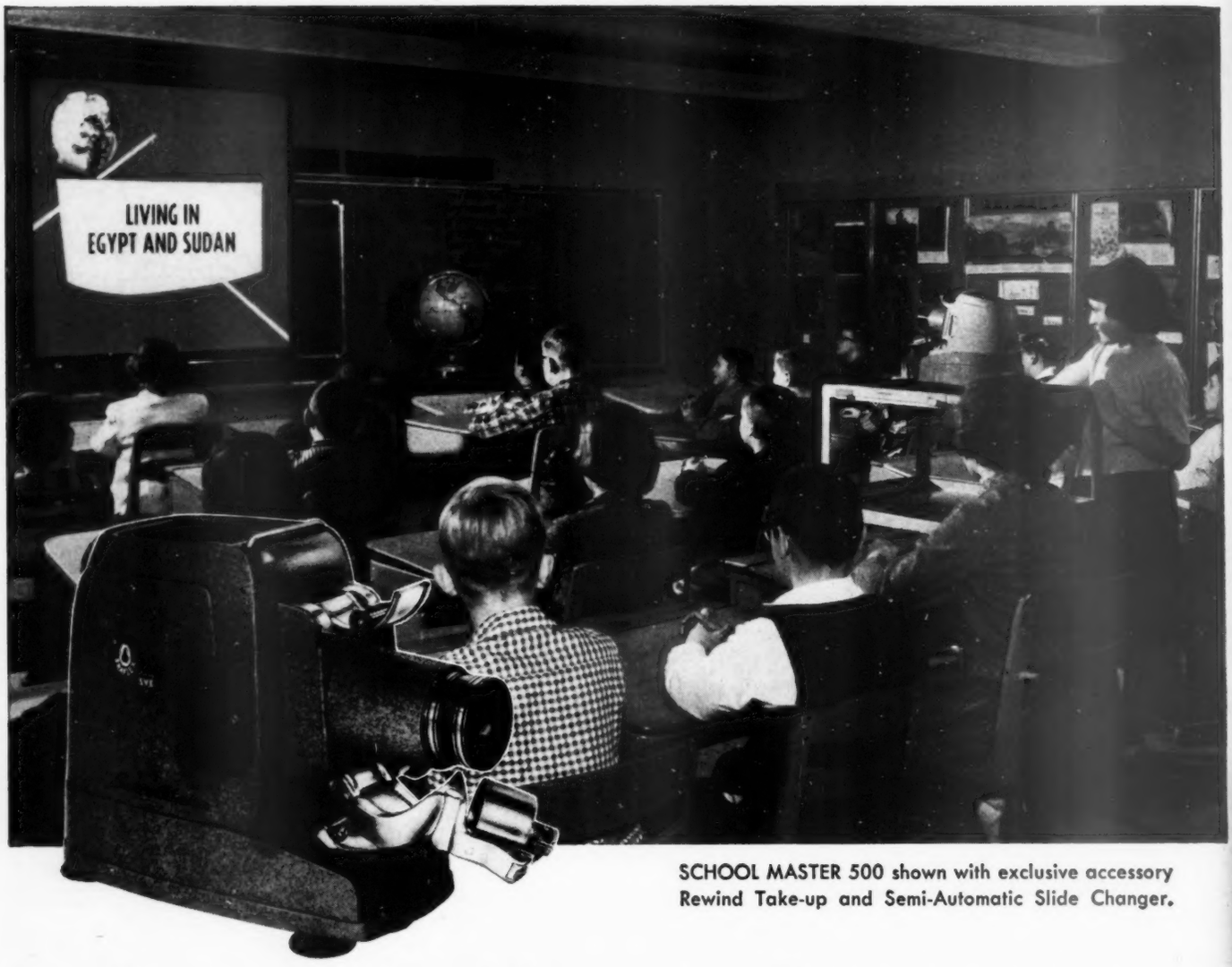
NYRACORD tile, which comes in a variety of beautiful colors, thicknesses, and sizes, is ideal for auditoriums, locker rooms and school shops. Modernizes and beautifies your floors. Easily cleaned.

TUF-TRED is available in any length, up to 6 feet wide, ½" thick. It provides comfort underfoot, and keeps feet off of cold damp floors. Ideal for entrances, lobbies and kitchens.

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School Master's brilliant screen images solve a lot of problems. You can project filmstrips or slides even in partially lighted rooms. Your teaching efforts are therefore more effective because of the greater attention and interest of your pupils... and their greater understanding of your presentation.

School Master Dual-Purpose Filmstrip and 2x2 Slide Projectors have been standard school and church audiovisual equipment for years. They're so simple to use, any pupil can become an expert projectionist with only a few basic instructions. In fact, the change from filmstrips to slides, may be made in seconds, without tools and without adding or removing parts. Simple to maintain, too... the entire optical system removes as a unit for cleaning. Exclusive telescoping built-in carrying handle permits easy carrying from one room to another. And its exclusive accessory Rewind Take-up, permits rewinding filmstrips into storage containers automatically. 500 watt and 750 watt manual or remote control models from $84.50.

For additional information on School Master projectors and accessories, see your Graflex AV dealer, or write Dept. SM-51, Graflex, Inc., Rochester 3, N. Y. In Canada: Graflex of Canada Limited, 47 Simcoe St., Toronto 1, Ontario.

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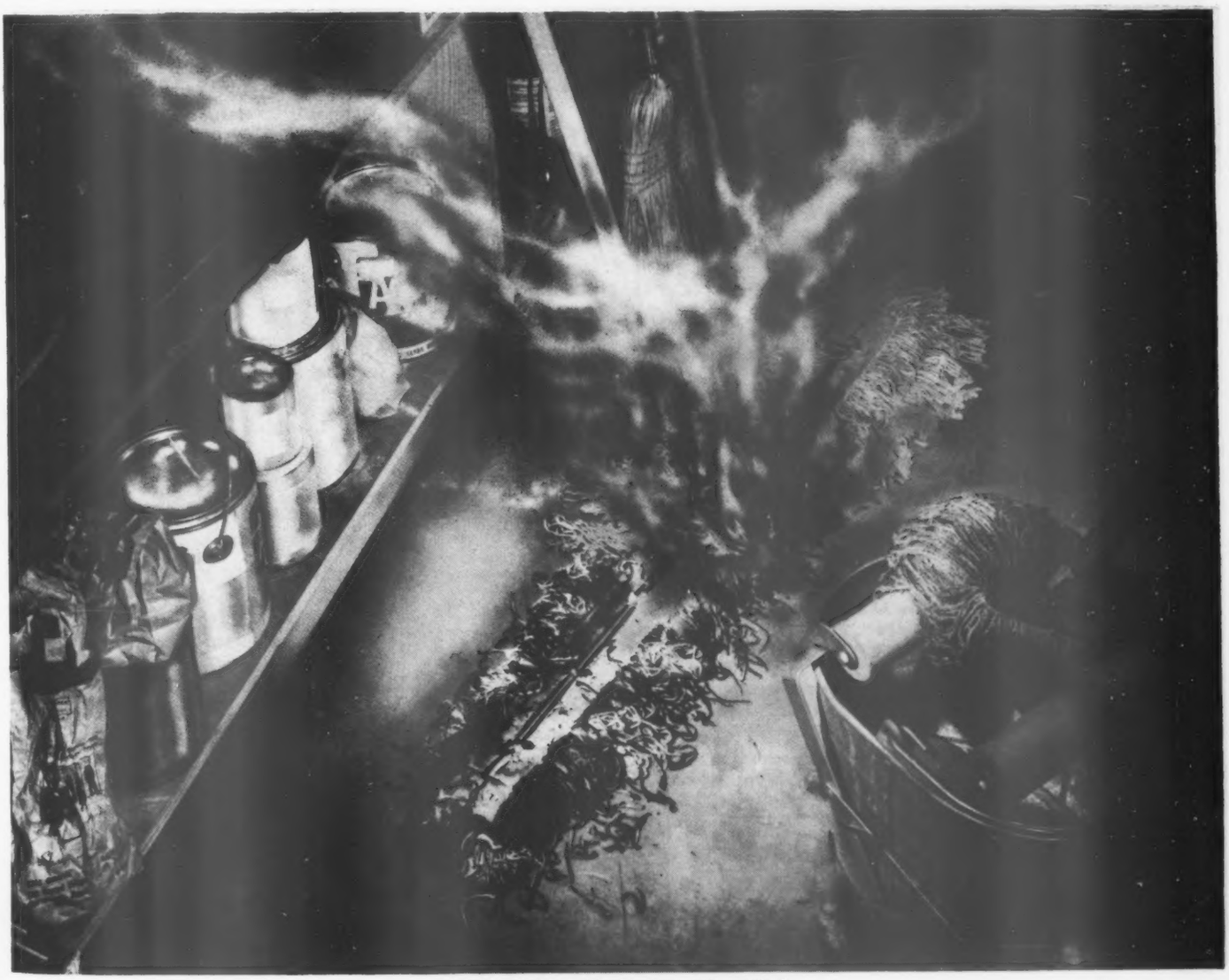
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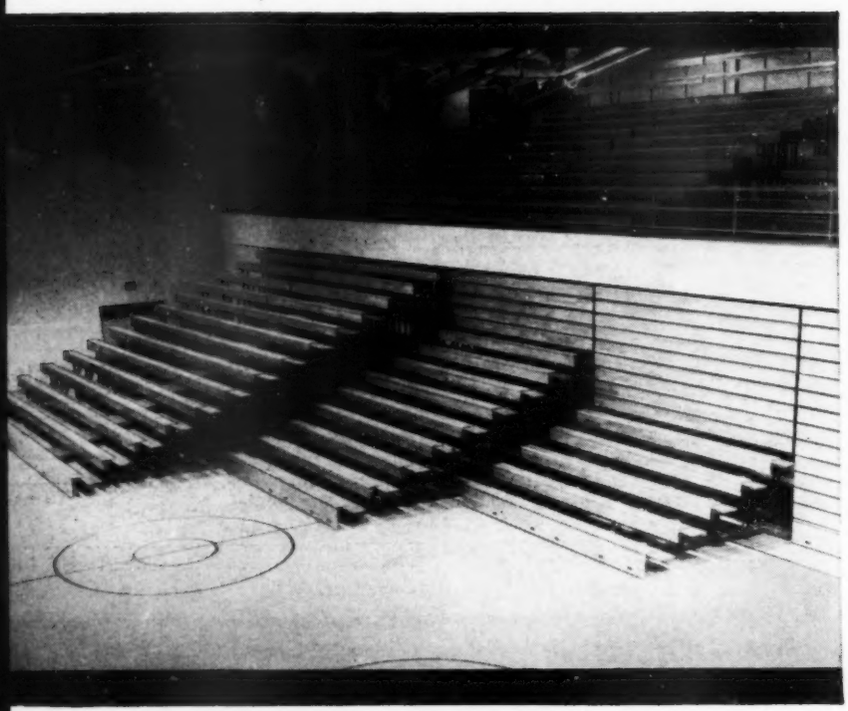
LIFE* FIREPROOF DUST-MOP TREATMENT ELIMINATES THE THREAT OF FIRE.

*Patent Pend.



(Circle number 746 for more information)

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TELESCOPING GYM SEATS

permit quick, easy set-up changes for every gymnasium event

YOU CAN assure profitable *full-time use* of your school gymnasium —planned or existing—with this modern equipment, available in recessed, wall-attached, movable and reverse-fold types. Seating set-up changes are made quickly to fit every event. Any number of rows can be locked open (*see photo*). Safway telescoping gym seats give you these practical advantages:

SPECTATOR COMFORT—Good sight lines from every seat. Ample foot and knee room; comfortable inclined seats.

COMPLETE SAFETY—Full protection for spectators, gym users and maintenance personnel.

FLOOR PROTECTION—Non-marking wheels roll in separate tracks to prevent grooving.

EASY OPERATION—Straight-line tracking with extra-large wheels and nylon glides. Motorized operation available (*not needed under 14 rows*).

GOOD LOOKS—Seats nest back into a handsome vertical cabinet. Safway's rich, warm Golden Oak finish will be in harmony with any interior.

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WRITE FOR BULLETIN 165-V

(Circle number 762 for more information)

but this technicality will be small reassurance to the hundreds of thousands of teachers, parents, and laymen who are deeply concerned, as of this moment, over the emphasis on life adjustment education in American schools.

THOMAS A. BLEDSOE
EXECUTIVE DIRECTOR
COUNCIL FOR BASIC EDUCATION
WASHINGTON, D. C.

More attention

SIR: You asked whether or not professional magazines should ignore the critics of education. They certainly should not and I would hope for more attention rather than less.

I would also like to comment on the first sentence of the article on "How to introduce a new idea to your taxpayers" (*SM, Feb. '61*). The article states, "There is no better test of a superintendent's political skill than his direction of a successful campaign for more money." This is possibly true but it should be underlined that there is more to the superintendency than political skill. The article is one of a whole sheaf of articles written after bond issues have been passed. I once wrote one myself. What I would like to see your magazine print is an article on how to raise more money, written before the facts, and guaranteed to produce results. Perhaps such articles have been written but I have not seen them.

MICHAEL T. GRIFFIN
SUPERINTENDENT
MECHANICVILLE, N.Y.

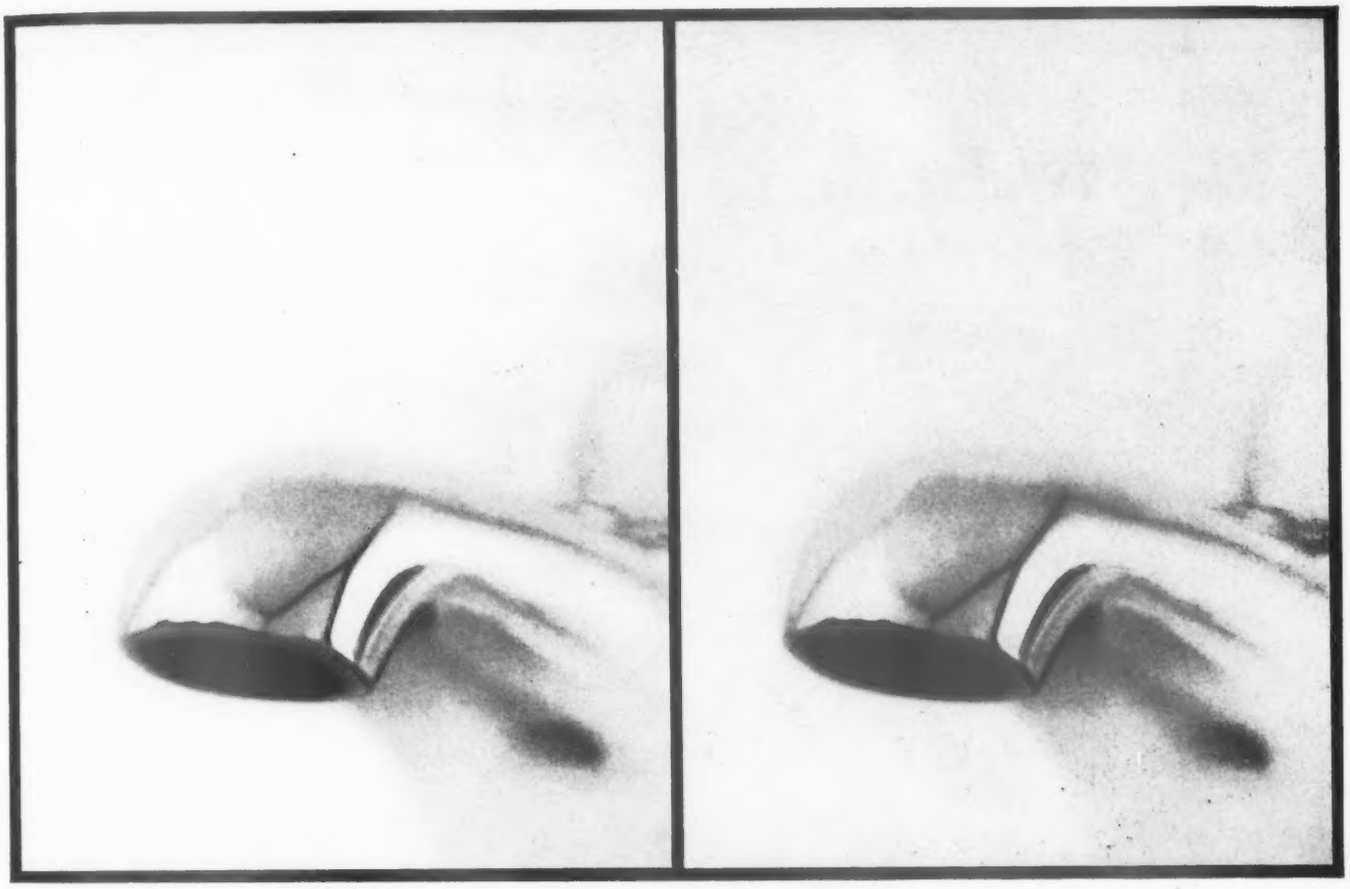
■ *We'll try.* ED.

Lunch funds

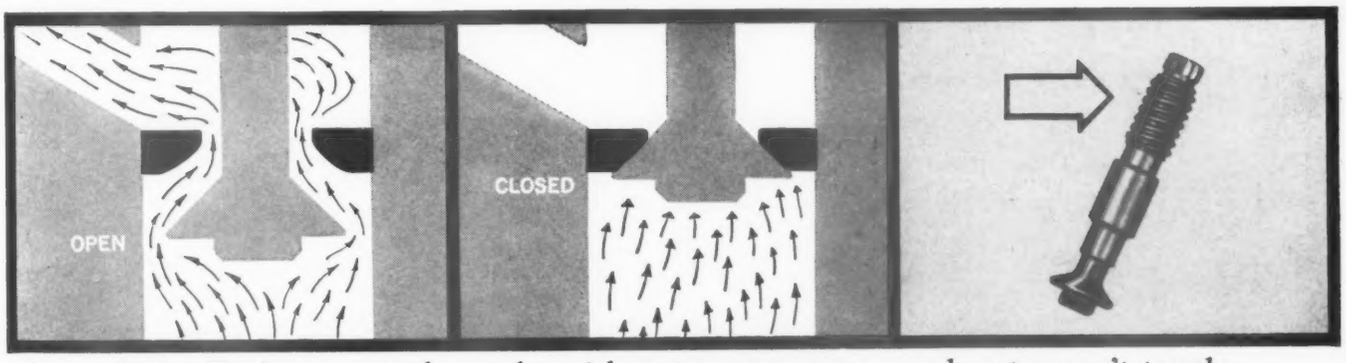
SIR: I am writing in regard to your article on managing lunch funds. *(See "Here's a better way to manage student lunch funds," SM, Feb. '61, page 74.)*

We prepare some 300 meals daily and find it easier to have a part-time cashier to ring up the sales. Those students using five or 10 meal tickets may buy them in the business office. The same cashier retains all the tickets, taking them out as the children file through the line. Later, she punches the cards and refiles them for the next day. Thus, teachers have absolutely *no* connection with lunch funds, tickets, etc. Besides, we have accurate cash register tapes with all information easily summarized for reports.

ROBERT E. NEIDICH
SUPERVISING PRINCIPAL
GREENPORT, N. Y.



One of these faucets will eventually drip. One will not. Can you tell which?



An exclusive Dial-ese control inside the Crane drip-proof faucet (left, above) works *with* water pressure, not against it. Perfect closure stops drips, stays tight... and water can't touch the sealed-off interior threads to cause corrosion damage.

The Crane Dial-ese ends the problem of continually fixing leaky faucets. Stops water waste. And does away with those troublesome leaks and drips that stain lavatories, sinks and bathtubs.

Dial-ese is an exclusive development of Crane. It uses water pressure to provide a perfect seal. The greater the pressure, the tighter the Dial-ese seats itself . . . unlike regular valves that crush and grind the washer against the seat, causing rapid wear and inevitable leaks.

In our test labs we've actually turned this amazing Dial-ese control off and on a thousand times a day for two years. It hasn't dripped yet.

In schools, hotels, hospitals and homes throughout the country, Crane fittings with these exclusive Dial-ese controls are reducing maintenance costs and water bills. They are made with the Crane flair for precision beyond ordinary standards.

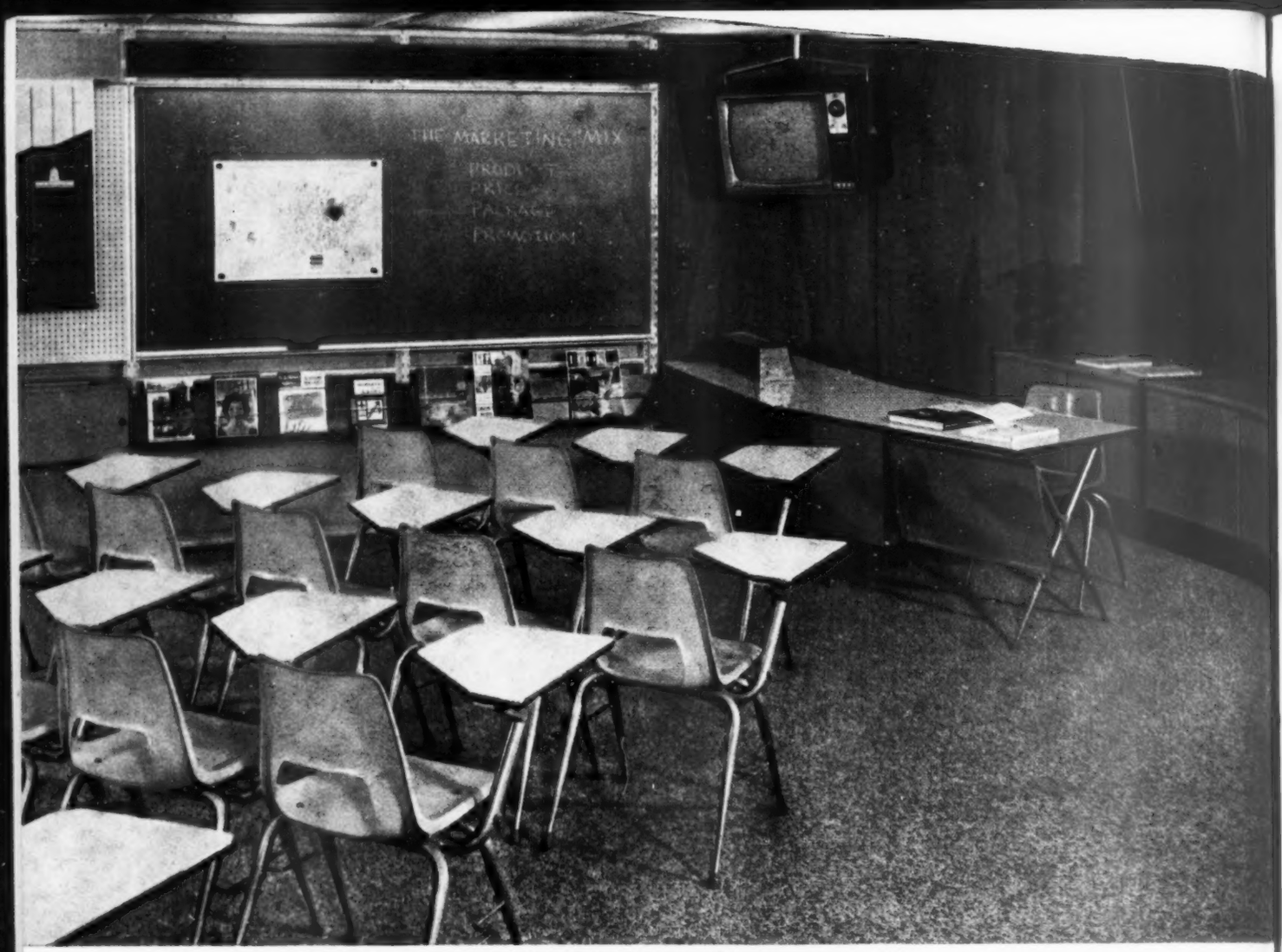
For more information see your regular contractor or Crane wholesaler. Or write Crane Co., Plumbing-Heating-Air Conditioning Group, Box 780, Johnstown, Penn.

AT THE HEART OF HOME AND INDUSTRY

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Shown: (above) *new Brunswick Tab-lette Chairs ganged for large group television-lecture session and* (below) *re-arranged for isolated study and seminar groups.*



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Traditional lecture or closed-circuit television . . . isolated projects or multiple subject instruction in a room—you can be sure that your students (and teachers) are physically arranged to get everything the course has to offer. For Brunswick—and *only* Brunswick—School Equipment of Advanced Design is specifically designed to implement the diverse and changing classroom requirements of both today *and* tomorrow.

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says Royal Manual typewriters are among the finest teaching aids possible.

"We are very happy with our Royal typewriters," states Mr. Taber. "Our Royals have stood up fine under heavy classroom wear. The Royal Representatives and service men have been most cooperative in rendering any required service."

Mr. Taber's district includes both Kern County Union H. S. and Junior College. They chose Royal typewriters, he says, "Because it has always been the policy of our district to provide our teachers and students with the finest teaching aids possible under our budget."

Undoubtedly you and your school have the same policy. That's why you should discover for yourself how the rugged Royal Manuals can provide better performance, better service, lower *total* typewriter cost in your school. Call your Royal Representative today for a demonstration.

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WHERE TO GET HELP

A guide to useful information

BUILDING IDEAS

For team teaching. Educational Facilities Laboratories has published a booklet which describes nine significant schools designed for team teaching.

The various schools have walls that move, few interior partitions, special spaces for large and small groups, teacher team headquarters, instructional resource centers instead of libraries and are equipped for television.

These schools were picked as being representative examples of recent, and planned, elementary and junior highs designed to accommodate team teaching. They represent "new and adventurous thinking, an attempt to meet this country's mounting educational challenges," according to the introduction.

This is the 12th in EFL's continuing series, "Profiles of Significant Schools."

SCHOOLS FOR TEAM TEACHING. *Educational Facilities Laboratories, 477 Madison Ave., New York City 22. Free.*

TEACHER TRAINING

Announcement of institutes. Here's the Office of Education announcement of counseling and guidance training institutes for this summer and the following academic year.

The booklet lists participating institutions and provides basic information for persons wishing to apply, including eligibility for enrollment and stipends.

The institutes are listed alphabetically by states where they will be conducted.

NATIONAL DEFENSE COUNSELING AND GUIDANCE TRAINING INSTITUTES—ANNOUNCEMENT. *Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. 15 pages. Free.*

SPECIAL EDUCATION

Educating the gifted. Here's a practical program of acceleration, enrichment and special groupings for educating the gifted.

After reviewing research on gifted students and pleading for better education for them, the book goes into some promising new approaches to the problem.

For example, Author Cyril William Woolcock advocates the elimination of examinations, as well as courses "crammed with content-to-be-learned and ground-to-be-covered." He says the pressures of these two devices too often subordinate the real aspects of a subject.

"The real function of the senior high school," he continues, "is to graduate gifted students with a high sense of obligation to improve the conditions of mankind . . . by applying constructive thought and action in careful and democratic ways." Woolcock emphasizes "leadership education" for the gifted, and says it is the most promising point of departure for future school programs.

The author also proposes that teachers provide opportunities for the gifted to make personal contact with leaders and gifted adults in the community. By so doing, the gifted student is exposed to "quality living, satisfactory performance and service, and the importance of integrity."

NEW APPROACHES TO THE EDUCATION OF THE GIFTED. *Silver Burdett Co., Morristown, N.J. 115 pages. $2.*

The mentally retarded. This nontechnical book is restricted to dealing with problems directly related to teaching the **educable** mentally retarded. It provides information, suggestions, examples and methods of teaching from readiness to the prevocational stage.

There are four general objectives in a program developed for teaching these children:

1. A mentally retarded child can achieve self-realization. He may be slow in achieving academically, but he can learn to understand his abilities and disabilities.
2. He can be taught how to be socially acceptable and socially competent.
3. He can be trained to develop good work habits and attitudes, a pleasing personality, a vocational skill, and how to be economically self-sufficient.
4. He can assume a degree of civic responsibility.

With these four objectives in mind, the book goes on to describe the char-

text continues on page 24



"my grandfather makes the best playground equipment in the whole world...because

he loves little people like me! he makes slides and swings and see-saws and all kinds of things. they're real strong and they're very safe. if you're going to buy playground things you better talk to my grandfather or my father first. they're both named mr. burke."



EXTRA HEAVY DUTY MERRY-GO-ROUND . . . highest quality materials combined with traditionally superior Burke construction make this model the leader of any merry-go-round manufactured.

Please send me your complete playground planning and specification file.

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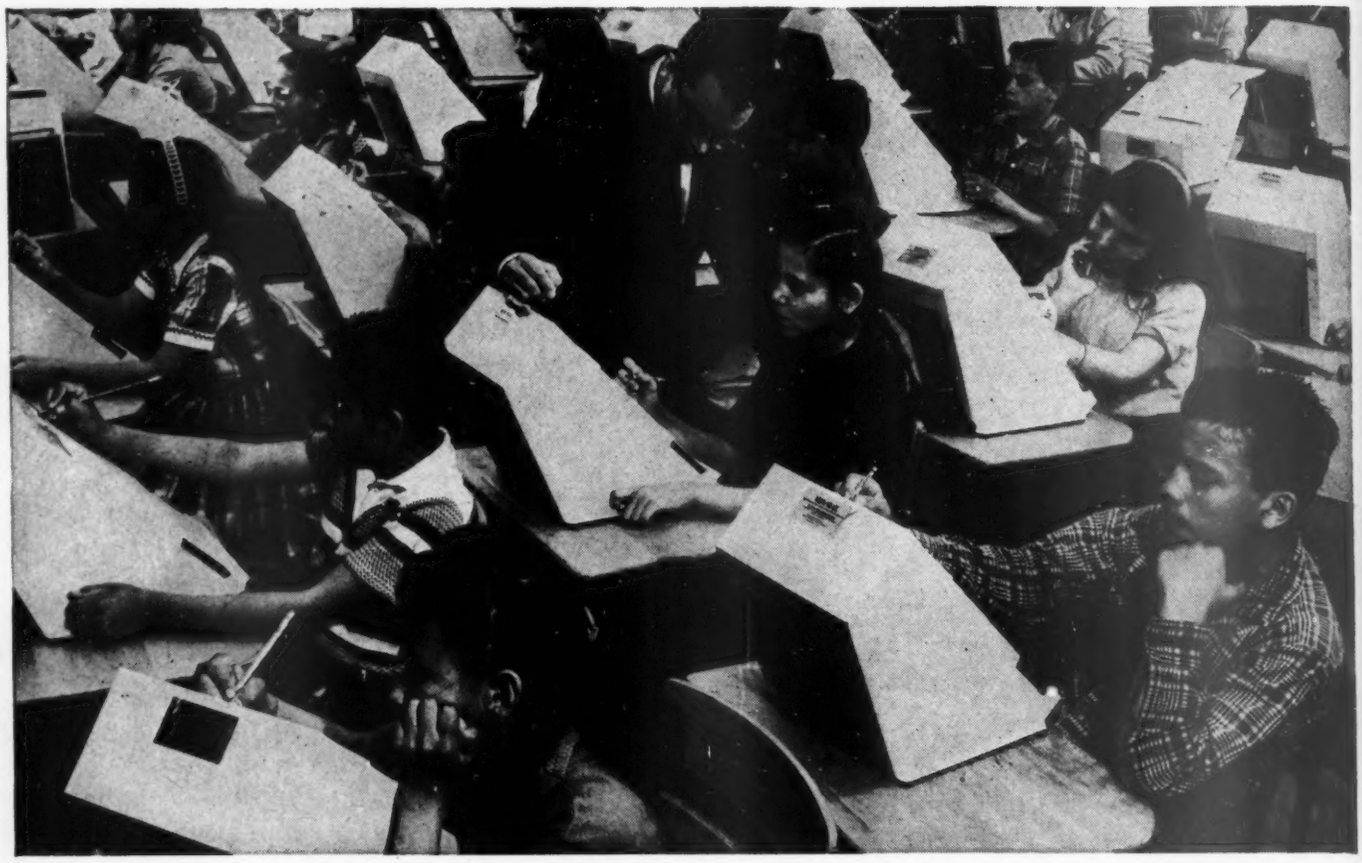
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HOW CLOSE ARE WE TO TEACHING MACHINES IN THE CLASSROOM?

A Special Report on TMI-GROLIER Programmed Courses, Programmed Texts and Low-Cost Teaching Machines

THE DEVELOPMENT of programmed learning has progressed to the point where teachers and educators everywhere are asking how this new instructional method will affect them, their schools, and their classes.

TMI-GROLIER, a pioneer in programming research and teaching machines, has been engaged in extensive experimentation and testing, under the leadership of a team of educators and psychologists headed by Dr. Lloyd E. Homme and Dr. James L. Evans.

Working closely with other psychologists in the field, and drawing on the best practical and theoretical experience available, TMI-GROLIER has produced a series of programmed courses and texts. In addition, we have perfected and are manufacturing the first practical low-cost teaching machine for use with programmed courses.

The TMI-GROLIER programmed courses and texts include spelling, arithmetic, algebra, punctuation, music; basic courses in Spanish, French, German, Latin and Russian, and others. Every course has been extensively tested, together with the TMI-GROLIER teaching machine, in actual classrooms, such as the Albuquerque classroom pictured above. Feedback data are incorporated in the final revisions of every course.

"Teaching machines, *properly programmed and properly used*, are our best hope for education."

This statement, made by Professor James McClellan of Teachers College, Columbia University, perfectly summarizes the aspirations of TMI-GROLIER.

We do not pretend to know all the answers to programmed learning. However, with the cooperation of leading educators, curriculum specialists, and psychologists, we have successfully completed the first necessary steps of this great educational experiment: we have produced a series of thoroughly tested programmed courses and texts; we are now manufacturing in quantity the first practical teaching machines for those educators who want to test them.

Our next step is clearly one in which TMI-GROLIER must explore, together with the educators in the nation's schools, the best possible means for *utilizing* the courses and machines we now have, and others which are in preparation.

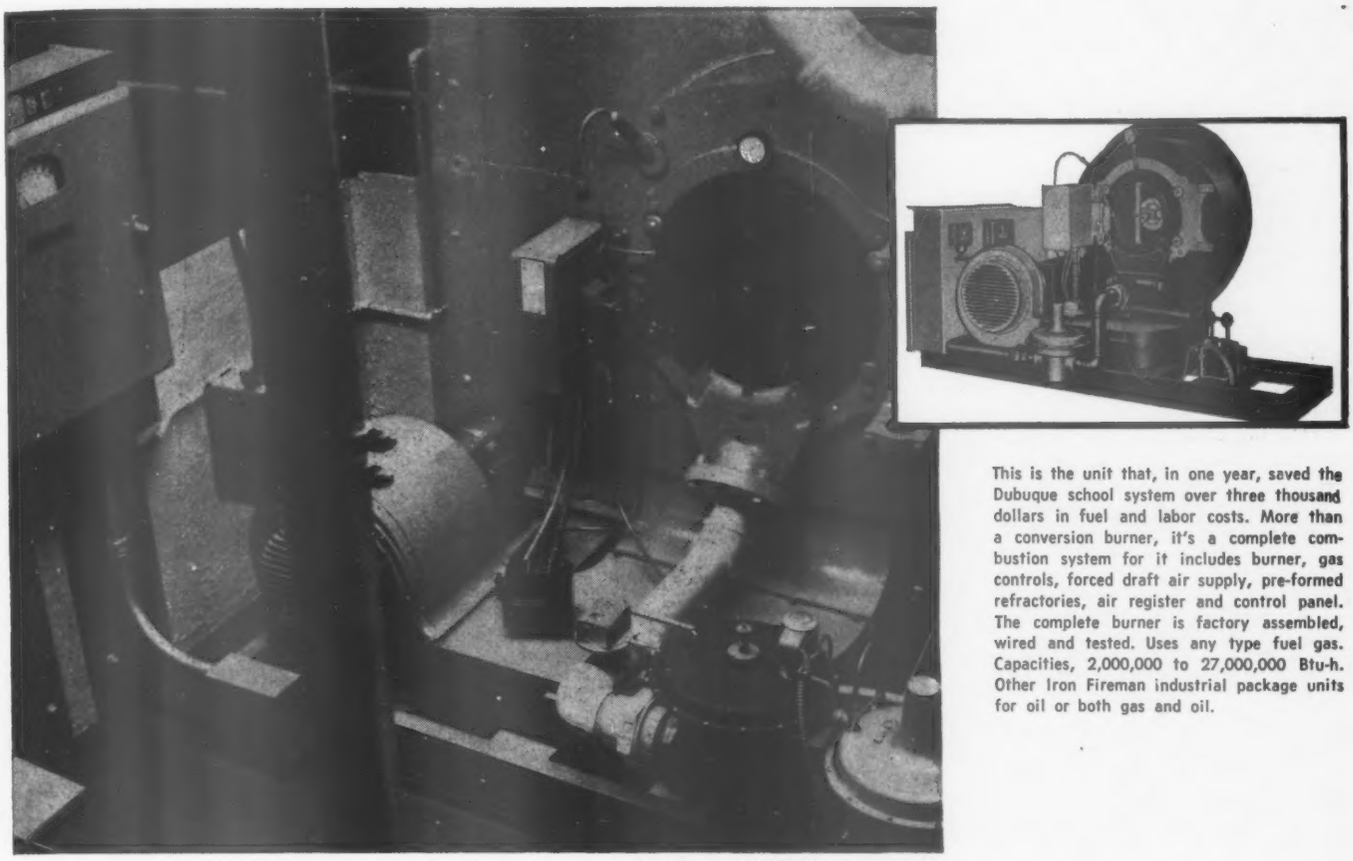
Together, we will find the answers to many questions: In what aspects of learning can teaching machines be of optimum use? How effective are they in the classroom? For the individual student? For the teacher? To what extent should school administrators and boards of education consider teaching machines and programmed learning?

In this second phase of development, TMI-GROLIER is now at work, correlating our findings with those of others in the educational world. Our courses are constantly being revised and re-designed to meet the actual needs of the teacher and classroom. Our full-scale Programming Facilities are coordinated with the mainstream of leading educational thinking. In short, today's classroom needs are determining the direction of TMI-GROLIER's expanding services in the field of programmed learning.

If you wish to know more about TMI-GROLIER's low-cost teaching machines and programmed courses, and how you can efficiently test and evaluate them, simply write on your school letterhead to Dept. 13

TEACHING MATERIALS CORPORATION
575 Lexington Avenue, New York 22, N.Y.
A Division of **GROLIER INCORPORATED**
Publishers of The Book of Knowledge and The Encyclopedia Americana

(Circle number 774 for more information)



This is the unit that, in one year, saved the Dubuque school system over three thousand dollars in fuel and labor costs. More than a conversion burner, it's a complete combustion system for it includes burner, gas controls, forced draft air supply, pre-formed refractories, air register and control panel. The complete burner is factory assembled, wired and tested. Uses any type fuel gas. Capacities, 2,000,000 to 27,000,000 Btu-h. Other Iron Fireman industrial package units for oil or both gas and oil.

Iron Fireman Model RFG gas package unit

Modernizing with Iron Fireman "makes net saving of $3,056.66"

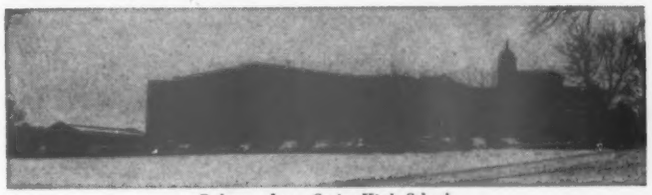
says Mr. Earl M. Wiegand, School Engineer, Dubuque, Iowa Public Schools

"In 1959 our fuel bill was $4,031.70," says Mr. Wiegand. Then an Iron Fireman forced draft industrial burner was installed in the existing boiler. Mr. Wiegand continues, "For the year 1960 our fuel cost was $2,986.04. In addition, we had a labor savings of $2,011.00. This makes a total net saving of $3,056.66."

Fuel savings—high combustion efficiencies of firing system saves substantially on fuel. Example—Dubuque job saved 25% first year.

Labor savings—ease of operation reduces manpower and maintenance costs. Example—Dubuque job saved $2,000 first year.

Save on installation—Assembled and tested at factory ready for bolting to boiler, complete package requires only power and fuel connections. Little or no on-site construction. No divided responsibility among several contractors.



Dubuque, Iowa, Senior High School

Versatile, flexible—Adaptable to most types of boilers for either new or existing settings. Example—Dubuque job required mounting in *rear* of firebox boiler.

No stack needed—forced draft firing eliminates need for chimney or stack in sealed combustion system; just vent. This saves on construction costs and avoids marring architectural lines.

Write for full information and detailed specifications.

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HEATING AND AIR CONDITIONING
AIRCRAFT COMPONENTS AND EQUIPMENT
MISSILE AND AIRCRAFT GYROSCOPES
ELECTRONIC EQUIPMENT
CONTROL INSTRUMENTS

IRON FIREMAN MANUFACTURING CO.
3160 W. 106th Street, Cleveland 11, Ohio.
(In Canada, address 80 Ward Street, Toronto, Ontario)

Please send technical information and specifications on Iron Fireman Forced Draft firing systems for ☐ gas, ☐ oil, or ☐ dual-fuel.

Name_____

Firm_____

Address_____

City_____ State or Prov._____

(Circle number 731 for more information)

acteristics of the educable mentally retarded and describes a special curriculum. Other chapters include teaching techniques and suggested methods of teaching writing, spelling, and other subjects.

TEACHING THE EDUCABLE MENTALLY RETARDED—PRACTICAL METHODS. *Charles C. Thomas, publisher. 301-327 E. Lawrence Ave., Springfield, Ill. 233 pages. $2.70.*

Educating migrant children. "The American goal of an adequate opportunity for each child to receive education commensurate with his capabilities is an ideal more nearly achieved in some sections of our society than others," according to the foreword of this book.

"One group for which the goal remains remote is made up of children whose parents move about the country in order to perform seasonal work in industrial agriculture. This book is an outgrowth of a special project conducted in two counties in Virginia and Florida on the education of these [migrant] children."

Special attention has been given, says Author Elizabeth Sutton, to the means of knowing the migrant child and adapting school procedures to his needs. The book has been written for teachers, supervisors, curriculum workers and administrators in school systems serving migratory children.

KNOWING AND TEACHING THE MIGRANT CHILD, *by Elizabeth Sutton. National Education Association, 1201 16th St. NW, Washington 6, D.C. 147 pages. $3.50.*

AUDIO-VISUAL

Equipment directory. More than 1,000 models of all types of audio-visual equipment are detailed in a directory published by the National Audio-Visual Association. About 700 photographs of the equipment are included.

This edition has three new categories of equipment—teaching machines, classroom radios and instructional television. The latter covers receivers as well as closed circuit cameras and monitors.

A reference section links brand and model names with the names of manufacturers.

1961 AUDIO-VISUAL EQUIPMENT DIRECTORY. *Published by National A-V Association, 1201 Spring St., Fairfax, Va. 289 pages. $4.75 ($4.25 if payment made with order).*

GUIDANCE

Emotionally handicapped students. To a degree, schools can increase the emotional strengths of children, according to this research report which describes one way this can be accomplished.

Early identification of emotionally disturbed children is the method. Testing, and evaluating results with achievement, is the process.

This publication carries the reader through each step. Questions are asked and answered. An appendix shows one version of rating pupils' mental health and behavior.

EARLY IDENTIFICATION OF EMOTIONALLY HANDICAPPED CHILDREN IN SCHOOL, *by Eli M. Bower. Published by Charles C. Thomas, 301-327 E. Lawrence Ave., Springfield, Ill. 120 pages. $5.50.*

The academically talented. "Guidance personnel in our schools have a profound obligation to give particular attention to those academically talented students who will furnish the leadership of our society. But the school that wants to develop such a program must first provide guidance services for the entire school population."

This report, based on a recent con-



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ference of guidance counselors and educators, highlights these elements of a guidance program particularly suited for the academically talented:

1. Early identification. A reminder that talented pupils are not found only in certain social, religious or economic groups.

2. Motivation. Alerting the counselors to problems of special groups, such as the economically deprived.

3. Attention to the creative, as distinguished from the high achiever.

The booklet then goes into detail on what a guidance program for the academically talented should accomplish, and the responsibilities of counselors.

Several challenges for guidance counselors are presented. Here are two:

"By far the largest number of academically talented high school graduates who fail to go on to college (up to 80%) are girls. A high proportion of the young women who do graduate from college fail to continue to work in fields in which they received their education. Our talented girls are persuaded that the twin careers of marriage and motherhood will continue to enrich their lives, offering them the greatest possible development and fulfillment of which they are capable. The counselor who would help the gifted high school girl must not only be informed, he must be open-minded and adventuresome.

"From 5 to 25% of the gifted students in many school systems are academic under-achievers, and in some schools the incidence is higher. Contributing factors for which the school must assume responsibility are inadequate curriculum content, poor teaching, weak work habits, weak study skills, low academic expectations, lack of individual attention to students, and lack of intellectual stimulation and challenge. The roots of under-achievement lie outside the schools, in early home and environmental influences. Even though he may be highly motivated, the academically talented student may be unable to achieve to his full capacity until properly counseled."

GUIDANCE FOR THE ACADEMICALLY TALENTED STUDENT. *Published jointly by the National Education Assoc. and the American Personnel and Guidance Assoc. Order from NEA, 1201 16th St., N.W., Washington 6, D.C. 144 pages. $1. Discounts on quantity orders.*

Career guide and reference. More than 120 occupations are analyzed in a comprehensive career guide published by Collier's Encyclopedia. The 28-page booklet is aimed at high school and college students and can be used as a reference by guidance counselors.

Drawn from the encyclopedia, the guide presents a 20-page occupational information chart which analyzes careers. Information is given on the nature of the work, the employment trend, necessary personal qualifications and preparation, average national earnings, etc.

YOU AND YOUR CAREER. *Library and Education Division, Collier's Encyclopedia, 640 Fifth Ave., New York City 19. 50 cents.*

Career films. Nine films produced by the U. S. Army describe career opportunities for high school boys who do not intend to pursue higher education.

Each film explains a different occupation with the attendant advantages and disadvantages. Men on the job describe their work. The film subjects cover mechanics, law enforcement, construction, electronics, metalworking, electricity, drafting and surveying, communications and the military.

The films are in black and white



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Any language teacher who can tune a TV set can easily qualify as an expert in the operation of this RCA Preceptor Language Laboratory console. Two switches give the teacher complete control for each student in the class; switch one, select program; switch two, distribute program, monitor and record student performance, communicate.

It's that simple. But in spite of its simplicity you get an amazing degree of versatility from the Preceptor console. It can handle 10 different lesson tapes simultaneously, transmitting any to any student booth. Thus several languages can be taught at once and a class divided according to individual abilities. What's more, a teacher can monitor and record any student's performance, can communicate with an individual, several students or the whole class and can have one student recite for the class or for selected groups.

You get the same degree of simplicity and versatility in the learning end of the system. The system may include as many student booths as space permits. Each may incorporate equipment for student listening and responding, or, in addition, for student recording.

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Interested in finding out about a Preceptor Language Laboratory that's tailored for your school? That's easy too. Your RCA Educational Electronic Products dealer will be glad to make a survey of your school language laboratory needs. For equipment information or the name of your dealer, write Radio Corporation of America, Educational Electronic Products, Building 15-1, Camden 2, New Jersey.

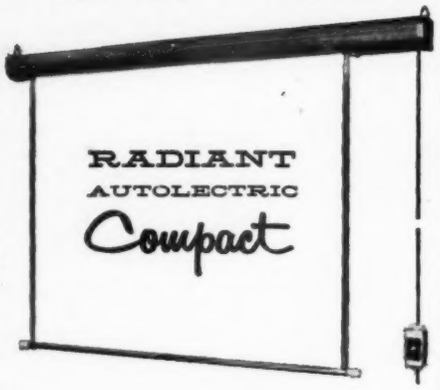
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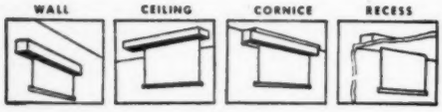
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and run 29 minutes each. The rentals are free.

CAREER REPORTS, *A series of vocational guidance films produced by the U. S. Army. For more information, write Modern Talking Picture Service, 3 E. 54th St., New York City 22.*

Student handbook. In Washington, D.C., the PTA has published a "do-it-yourself" counseling kit for junior and senior high school students. The guide is a simple method of assisting students select classes through their public school years. Parents and counselors also find the booklet useful.

There is a four-track system in Washington secondary schools. This catalog, written in basic language and readily absorbed, describes the courses in each track; recommends a sequence of classes for particular careers; lists the subjects required for graduation, track by track and grade by grade; and lists subjects required for college entrance.

The handbook also contains a chart showing aptitudes and income expectations for major groups of occupations, condensed from publications published by the U. S. Department of Labor.

CURRICULUM HANDBOOK: *Planning your Education. D. C. Congress of Parents and Teachers, Grant School, 22nd and G St., N.W., Washington 7, D.C. 62 pages. 35 cents.*

CONSTRUCTION

Lighting handbook. Serving architects, electrical contractors and engineers, this lighting handbook by the Westinghouse Corp. contains information on distribution and light measurements, light sources, and tables of recommended lighting levels.

The pocket-sized manual also has chapters on interior wiring, and classroom, office and exterior lighting.

LIGHTING HANDBOOK. *Published by Westinghouse Lamp Division, Bloomfield, N.J. 250 pages. $3.*

FINANCE

More money for education. "This is a book," opens Author Roger A. Freeman, "on how to raise taxes for the public schools. . . . If long-range expenditure trends continue through the 1960's, school revenue needs will double by 1970. The goals of administrators may run much higher and could reach well beyond the $30 billion mark."

The question, he says, is not whether the country can afford to spend

text continues on page 32

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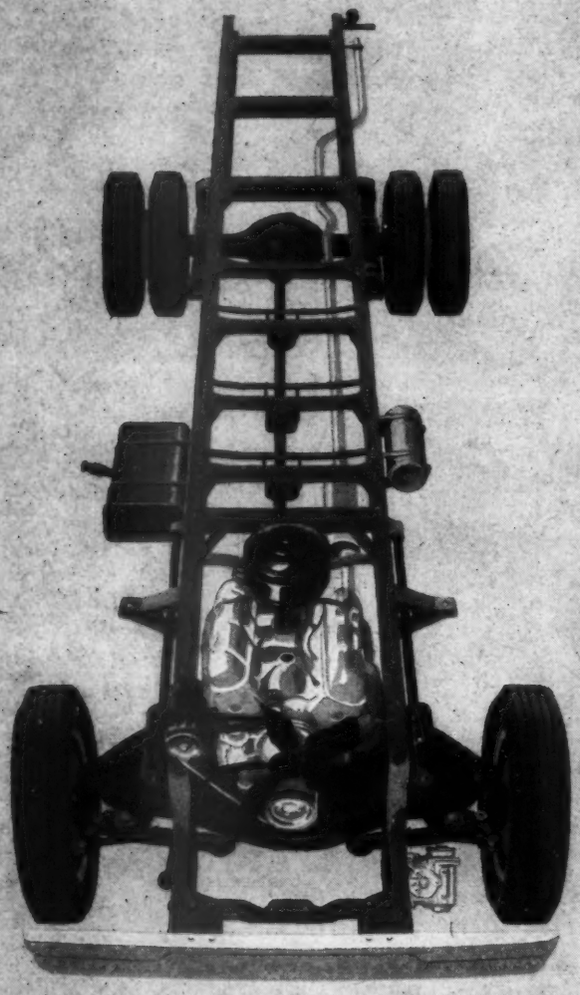
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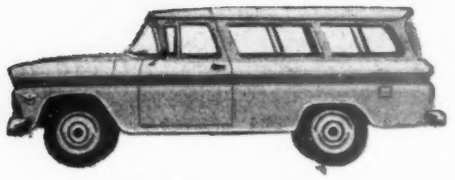
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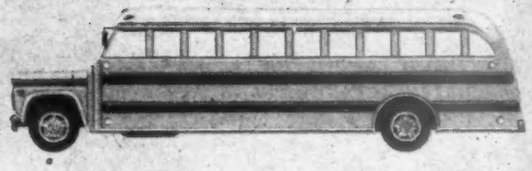
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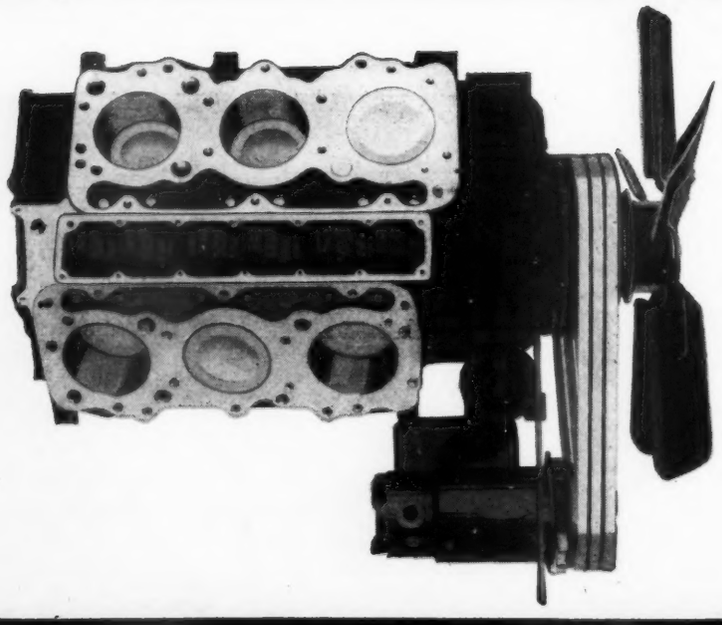
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The economic advantages of school buses made by GMC Truck & Coach Division of General Motors Corporation

The two prime considerations in the building or buying of school bus chassis are the absolute dependability of the vehicles, and the cost of operating and maintaining them over a 10 to 12-year span.

To begin with, GMC's background in this business, plus its reputation for dependability, are unsurpassed—perhaps unequalled.

GMC school bus chassis are manufactured under the industry's most rigid quality controls; every one equals or exceeds all national standards for school buses. This quality is a reason more GMC 60-passenger chassis are purchased every year than any other makes.

In an all-out effort to help customers reduce operating and up-keep expenses, GMC has introduced more new engineering and design advancements recently than the industry has seen in 20 years.

For example, one big advancement is the exclusive new heavy-duty V-6 gasoline engine which GMC installs as standard equipment in every GMC school bus chassis. It is built so strong and to such rigid standards that 200,000 miles without a major overhaul should not be at all uncommon if the engine is given normal use and care. Only one of its type in America, the GMC V-6 has caused more stir and favorable comment than any engine since the diesel.

GMC torsion bar springs require no maintenance whatsoever. As part of the independent front suspension system, they not only provide a much more comfortable ride but protect the bus itself from damaging jolts and strains on rough roads.

New GMC frames are much stronger and stiffer than ever. Brakes are bigger. Clutches last longer because they are larger and smoother acting. Thick rubber engine mounts cut way down on vibration.

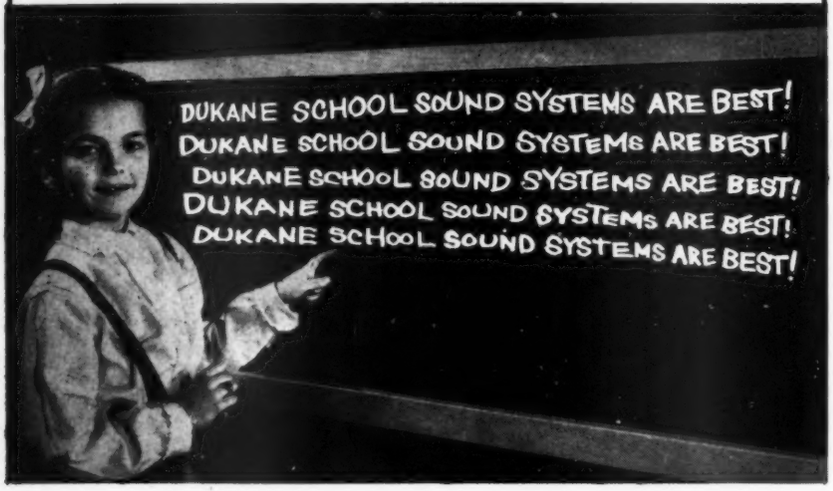
Combine all these advancements and you have yourself the finest school bus money can buy. Quality is no luxury. On the contrary, it is something tight budgets demand! Call in the GMC man.

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IF THEY CAN'T WALK TO SCHOOL... LET THEM RIDE IN THE BEST!

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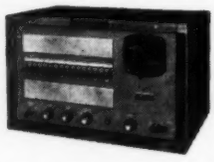
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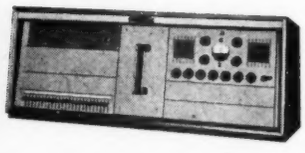
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these billions, but where the funds will come from. He then explores the possibilities—the U. S. tax structure and fiscal system, including property taxes, consumption taxes (sales, gross receipts, and excise), and income taxes. In Freeman's view—from whence cometh the funds, cometh the control.

If federal aid brings federal control, he says, it may be the fault of states and localities. "The fact that virtually every grant-in-aid program requires state or local matching suggests that what is lacking is not so much capacity to spend, but willingness to spend. States and communities are not incapable of expanding their revenues."

Freeman concludes with the warning that a shift of control to state and federal levels transfers all effective power out of the hands of parents and communities.

TAXES FOR THE SCHOOLS. *Published by Institute for Social Science Research, Continental Building, Washington 5, D.C. 441 pages. $5.*

FIRE

Protecting libraries. What you can do to prevent fires in your school libraries, and case histories of many library fires are included in a booklet published by the National Fire Protection Association.

An additional feature is a full report of fire tests conducted in typical library bookstacks. The tests demonstrate the effectiveness of automatic sprinklers in limiting damage.

The 16-page bulletin also contains a point-by-point program, showing how to warn and evacuate the occupants of a burning building, how to confine a fire, and how to train library staffs for "fire action."

FIRE RECORD BULLETIN FR 60-1. *National Fire Protection Assoc., 60 Batterymarch St., Boston 10. 50 cents.*

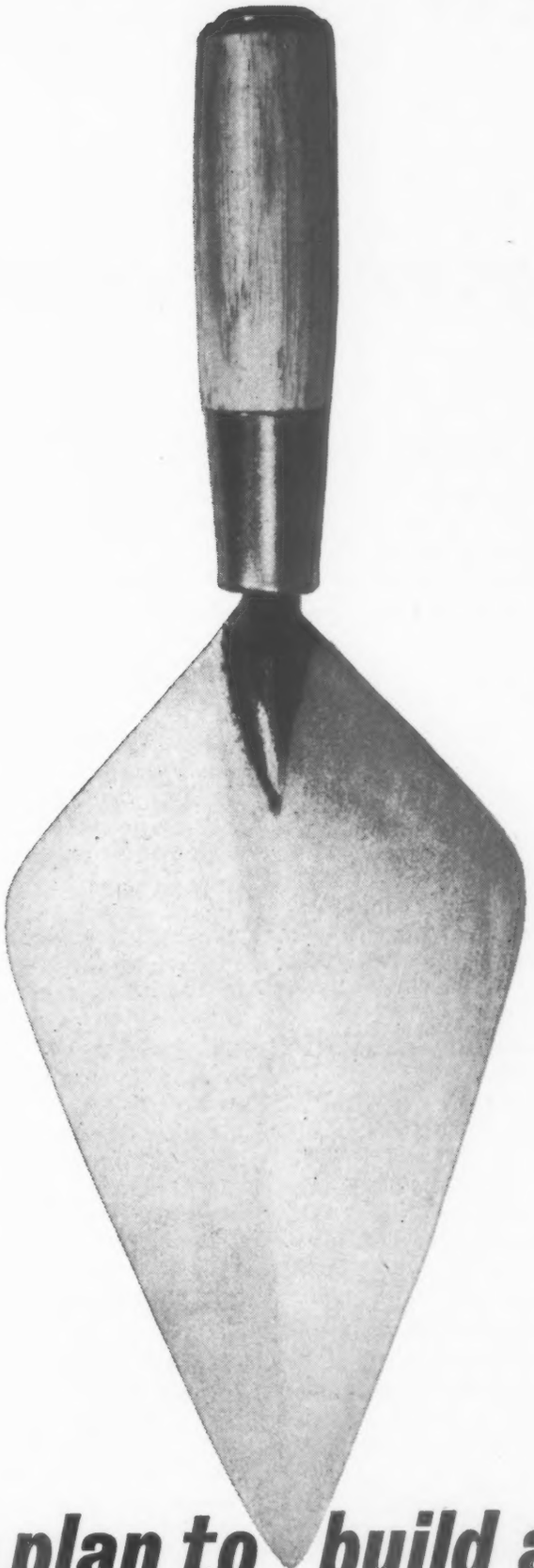
GENERAL

Educational systems. Persons who are not acquainted with educational programs and their organization will find this Office of Education booklet helpful.

Chapters are devoted to the purposes and structure of education, covering financing and local control, and including vocational and adult education, and research.

There is also an annotated bibliography and a glossary of educational terminology.

EDUCATION IN THE U.S.A. *Published by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. 134 pages. 50 cents.*



When you plan to build a school

. . . let the application specialist from your local gas company help you, your architect and consulting engineer choose the most efficient system for heating, cooling and ventilating. On the following pages you'll see how modern gas equipment can give your school complete classroom comfort—at reasonable cost.

How your GAS company can

1. The Planning Team Right from the beginning, when you have chosen the architect for your new school, you realize that your project calls for a lot of teamwork—particularly in the design for efficient heating, cooling and ventilating systems.

A great help at this stage . . . for school management, architect and engineer alike . . . is the counsel of your local Gas Company regarding the economy and application of modern gas equipment for these systems.

Heating, cooling and ventilating facilities in many of the largest, most modern schools have been planned with the help of local Gas Companies' application specialists.

You can take advantage of this qualified help by setting up a very effective Planning Team: School Management—Architect—Engineer—Gas Company.

2. The Complexity of Specification Writing Your architect's and engineer's knowledge of specification writing plays a major role in increasing the value of your school and keeping costs at a minimum. But *your* acquaintance with this vital function of school planning can be of assistance to them.

There are four major recognized methods of specifying materials and equipment for new building projects, such as your new school:

a. The "Descriptive" Specification. Materials and equipment are described in detail, but no brands specified. Time may be lost in seeking the exact equipment described, and there is little assurance of quality.

b. The "Flat" Specification. Exact brand is specified. No substitutes allowed. No protection against high costs.

c. The "Open" or "Or Equal" Specification. Several makes are named, or the specification describing the required equipment includes an "or equal" clause. Contractor must submit his lowest bid regardless of quality. Manufacturers may hesitate to bid their lowest prices, since contractor is free to "shop" for even lower prices (to his advantage) after he is awarded the contract.

d. "Base Bid With Alternate." Specific brands are specified for the base bid, but a bidding contractor may propose substitutes. This assures quality and permits alternatives, providing the contractor states in his bid to you the actual deduction or addition. You can then compare price, quality and service of several manufacturers on an equitable basis. *School authorities agree that this is the most acceptable type of specification.*

3. Specifying for Present and Future Needs You may not plan now to operate an all-year school. But this subject is being considered by many school authorities. In fact, an 11- or 12-month school has been tried and is now being used. If there's a possibility your school may change to this system in the future, it would be wise to plan *now* for year 'round heating, cooling and ventilation.

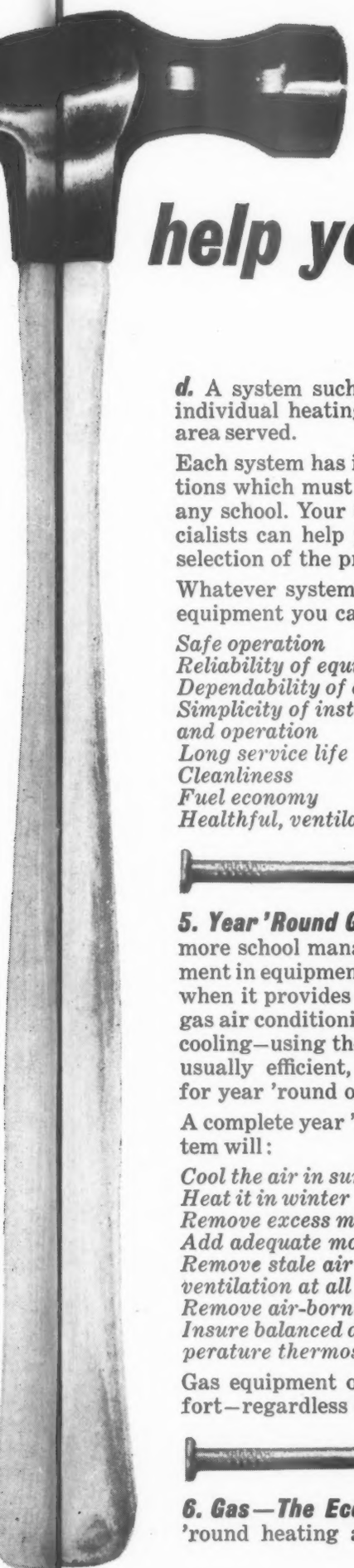
Even your *present* needs may call for an all-year operation, with such activities as summer school programs (including "make-ups" or, in the case of gifted children, "speed-ups") . . . community recreation . . . adult education . . . civic functions . . . or perhaps a community library service. The success of such projects is well worth the investment in facilities for year 'round comfort.

4. Wide Choice of Systems for Year 'Round Comfort The makers of modern gas equipment for year 'round heating, cooling and ventilation offer an unusual variety of systems—designed to meet the needs of every type and size of school, regardless of geographical location. Here are some of the choices:

a. A conventional hot water system using convectors or radiators, usually supplemented with exhaust fans for ventilation.

b. Radiant gas heating used in combination with a ventilating system.

c. A central or zoned system combining heating, cooling and ventilating in the same system of ducts.



help you build a better school

d. A system such as the unit ventilator, using individual heating and ventilating units in the area served.

Each system has its own advantages and limitations which must be considered in the plans for any school. Your Gas Company application specialists can help you and your architect in the selection of the proper system.

Whatever system you choose, with modern gas equipment you can be sure of:

Safe operation
Reliability of equipment
Dependability of energy source
Simplicity of installation, maintenance and operation
Long service life
Cleanliness
Fuel economy
Healthful, ventilated air

5. Year 'Round Gas Air Conditioning More and more school managements agree that an investment in equipment to condition air is worth more when it provides year 'round service. And since gas air conditioning systems deliver heating *and* cooling—using the same basic fuel—they are unusually efficient, economical and space-saving for year 'round operation.

A complete year 'round gas air conditioning system will:

Cool the air in summer
Heat it in winter
Remove excess moisture in summer
Add adequate moisture in winter
Remove stale air and provide effective fresh air ventilation at all times
Remove air-borne dirt
Insure balanced distribution of the air, with temperature thermostatically controlled.

Gas equipment offers complete classroom comfort—regardless of weather or season.

6. Gas—The Economy Fuel For modern year 'round heating and cooling systems, no other fuel matches the long-run economy of gas. Fuel costs—as opposed to first costs—will continue for the life of your school. So they deserve serious consideration in your original planning. As a matter of record, many schools have amortized the first cost of their gas equipment through comparative savings on fuel. Thrifty gas keeps your operating costs down all year, every year.

7. Gas—The Safest Fuel The gas industry has a prime interest in the safety of your pupils. The more than 200,000 people in the gas industry—most of them with children of their own—have seen to the security of each installation.

No other industry in the United States has encouraged such rigid self-regulation to insure the safety of its product in homes and schools. Through the American Gas Association Laboratories, gas equipment is tested to meet the stringent requirements of the American Standards Association. The gas industry has drafted safe installation methods which are practiced by every Gas Company in the country.

Most important, the gas industry has cooperated with municipal authorities to have your building codes reflect the most up-to-date practices regarding the safe installation and safe operation of gas equipment.

8. Gas—For Complete Classroom Comfort All Year Long Your pupils can learn more – your teachers can teach more effectively – in more comfortable surroundings. Let your Gas Company help you and your architect choose the most efficient system for heating, cooling and ventilating. Just call your Gas Company and ask for their Application Specialist.
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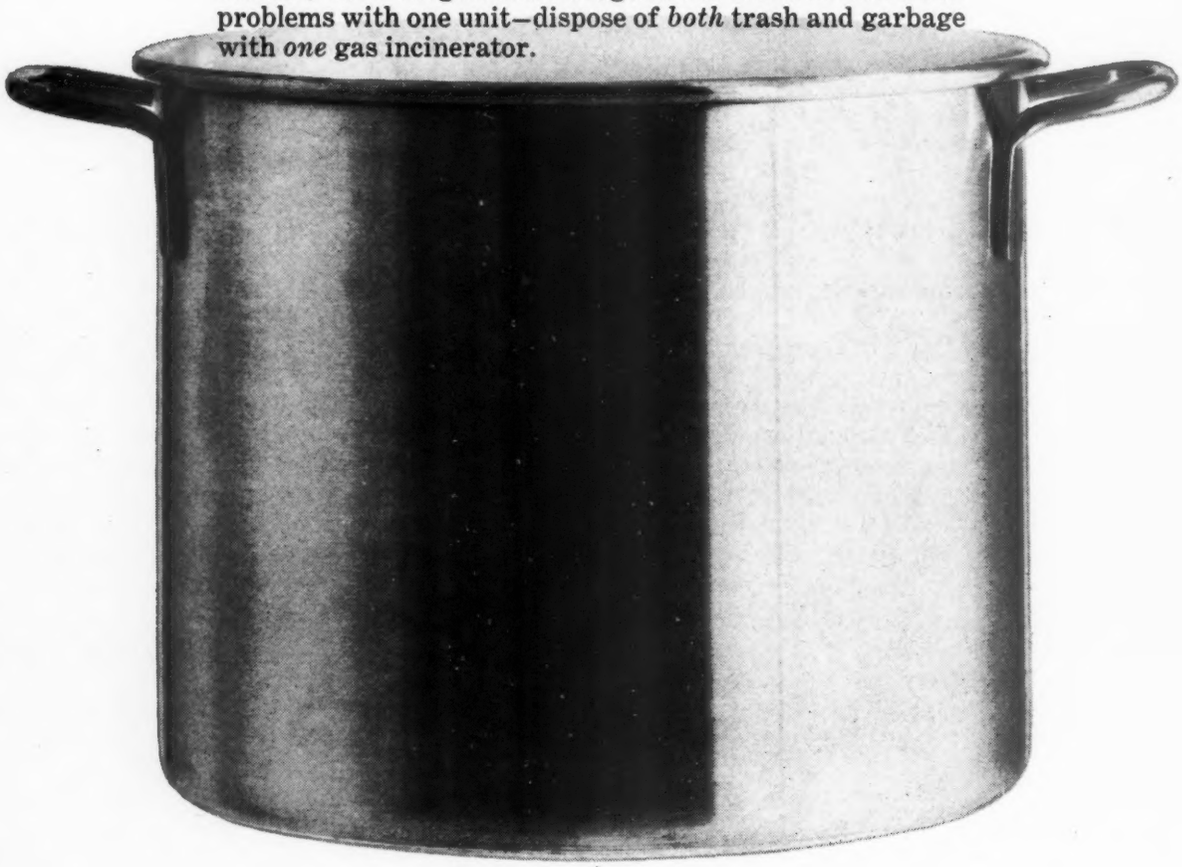
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BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

SM FOOD CLINIC

Richard Flambert answers your feeding questions

QUESTION: I have read many articles concerning how to equip a school cafeteria. But I have also heard often that most of our school cafeterias are overequipped. Would you be willing to comment on this?

■ Kitchens which were planned eight or 10 years ago have become completely obsolete because of advancements made by the fabricating and equipment industries. The recent trend to turn the planning of a cafeteria over to a professional food service consultant—rather than to the architect, the equipment house or the business manager—has made it possible for schools to keep up with all of the advances being made. This has resulted in far better design and efficiency.

The objectives of school feeding are to serve well-prepared food quickly, to maintain a balance between food cost and payroll cost, to increase participation and to enhance the health of the students. A school cafeteria usually has to last almost as long as the building. It is for this reason that the modern designer attempts to install the finest equipment, but with a light hand. It is not economical, for example, to put in a galvanized iron sink which will need to be replaced in a few years.

There is no economy in hand dishwashing, and certainly no sanitation. However, there is also no economy in installing a three compartment, peg-type dishwasher in an elementary school.

Equipment is changing. The use of ranges is diminishing. More and more is food prepared in ovens and in combinations of steamers and steam-jacketed kettles. The use of hot food counters is diminishing. Food is being served directly from the preparation areas to the counters in standard size pans, and then directly to the student.

The use of walk-in refrigerators is diminishing. More and more, the reach and pass-through refrigerators are taking their place for reasons of economy, flexibility and efficiency.

The answer to your question does not lie in a generalization about whether school cafeterias are overequipped or underequipped. Each cafeteria operation must be considered as a separate entity and the equipment chosen must be exactly what is needed to handle the type of operation in which a cafeteria is going to be engaged. That is why we feel so strongly that a food service consultant is an important part of any team planning a new school.

QUESTION: You have taken a number of pot shots at snack bars recently. We have found in our district, however, that the snack bar is a wonderful profit maker for our schools. Isn't this an important reason to have one?

■ Let me go back to what I have said before. We do not oppose snack bars. We do oppose their abuse.

The matter of profit in snack bar operations is something that should be examined carefully by school authorities. The philosophy of a school lunch program, presumably, is to teach good nutrition and serve wholesome food to the growing child. Many districts are doing this without the use of snack bars for the purpose of profit. It seems to us that the whole purpose of the health program is defeated if profit is more important than health.

To sum up: "A profitable snack bar in place of a lunch program—no! A profitable snack bar used when students are dismissed from school and engaged in extracurricular activities—yes!"



About the author. Richard Flambert is a partner in the firm of Flambert and Flambert, San Francisco, St. Louis, Omaha and Chicago, food service consultants and engineers specializing in schools and institutions. He is president of the International Society of Food Service Consultants.

"PAPER service cut our capital investment so sharply we could afford classroom improvements"



Mrs. Ruth Craig
Food Service Mgr.
Citrus Union High School District
Azusa, California

A feature of each of the two ultramodern schools in the Citrus Union High School District is a kitchen designed for all-paper service. Food prepared there is distributed to small service kitchens located in the four dining rooms in each school. Refuse goes directly from trays to receptacles which are removed daily. Service is so systematic that 1550 students are fed in only 30 minutes.

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"By designing our kitchens originally for all-paper service," Mrs. Craig adds, "we have been able to realize extensive capital investment savings in both buildings and equipment. We have utilized these savings to improve our classrooms and other facilities."

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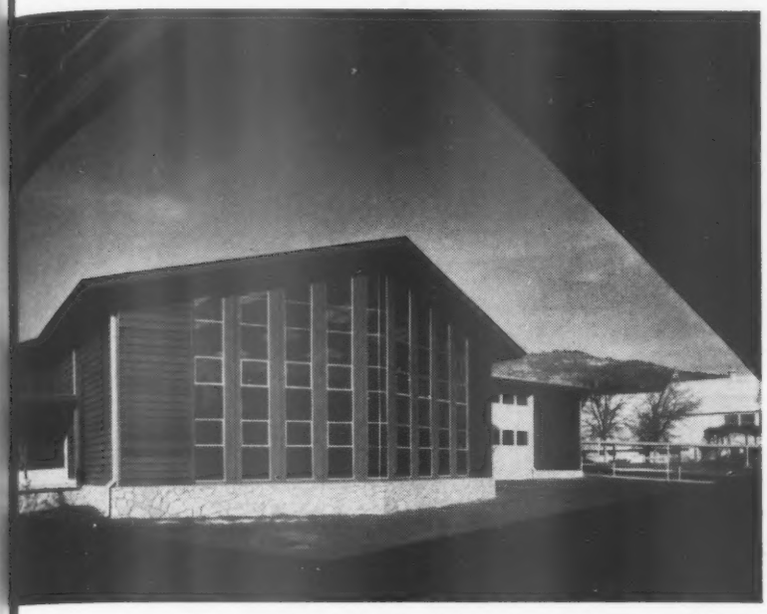
PAPER the personal food service

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Sierra Union High School, Auberry, California
Architect: *Alastair Simpson*
Consulting Electrical Engineer: *Edward Lowe*



How Day-Brite helps light the way to learning

The designers of this modern high school wanted the library to be the most attractive building on the campus . . . to encourage students to *use* it.

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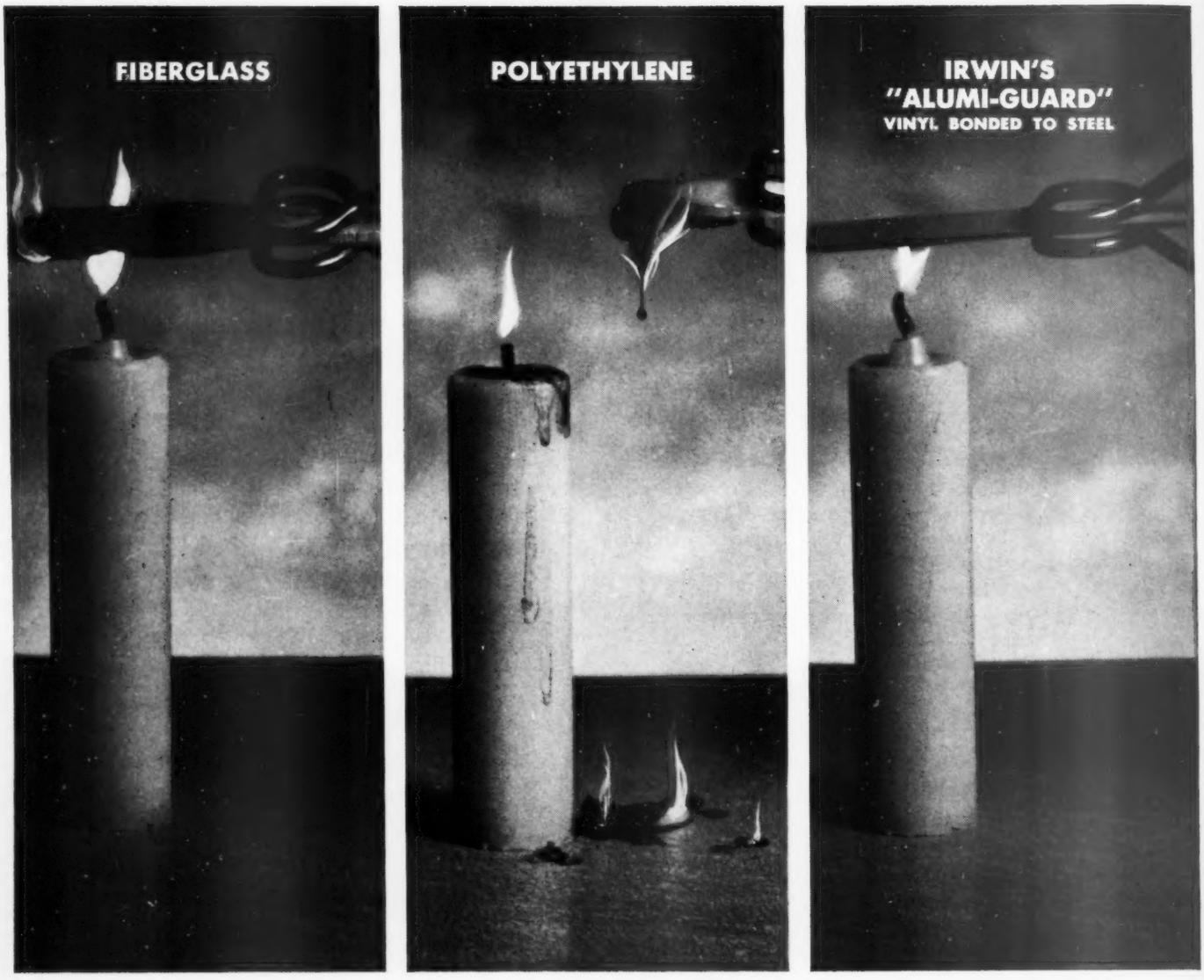
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Cut cafeteria costs. Your cafeteria dieticians will find many cost cutting ideas in this booklet published by the Campbell Soup Co. In addition, there are several ideas on how to create distinctive soups by adding unusual ingredients and suggested garnishes. Some soup recipes are included.

For a free copy, circle number 854 on the Reader Service Card.

Heating catalog. The Edwin L. Wiegand Co. is distributing a catalog covering its line of heating equipment. Each item is illustrated and accompanied by dimensions and application data. Heaters, convectors, ventilators and blowers are included.

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Elementary science aids. Several items in this 64-page catalog will aid elementary teachers having no technical background in science. There is a 16-page syllabus which explains units of study for each grade, lists materials needed for each unit, and suggests uses for the materials. The remainder of the catalog includes listings of science books for children, recordings, and some tips on a home study program and a science club program. The catalog is published by the Science Materials Center.

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Planning a parking lot? Here's a 40-page manual that shows you how to lay out plans for every conceivable type of parking. Detailed sketches and layouts cover parking at 90°, 60°, and 45° angles, plus aisle widths, and entrance and exit sizes. Patterns include straight row parking, perimeter and island parking, slanted stalls, herringbone pattern and V-shaped pattern. Parking barriers, guides, and mechanical aids are also discussed. Western Industries publishes the manual.

For a free copy, circle number 902 on the Reader Service Card.

How to control termites. Termite problems can be cut if a few simple rules are followed when erecting a new building. A booklet published by the E. L. Bruce Co. describes the procedures for "building out" termites in wood and slab-type construction. There are also brief descriptions of wood fungi, carpenter ants, powder-post beetles and dry and damp wood termites.

For a free copy of this booklet, circle number 889 on the Reader Service Card.

Electrical safety tips. Written for persons who install and use electrical appliances and equipment, this booklet provides up-to-date information on new types of grounding devices developed to insure safety. The construction of grounding terminals and grounding contacts, and illustrations of typical installations, are featured. The book is published by the Arrow-Hart & Hegeman Electric Co.

For a free copy, circle number 865 on the Reader Service Card.

Aids inventory, purchasing. Science teachers will find this guide to purchasing and inventory helpful. Published by the Central Scientific Co., it lists standard apparatus alphabetically and by purchase guide number. Each listing is accompanied by columns for inventory count, number to be ordered, price of each and total price. There are also sections which include audio-visual equipment and materials, and mathematics equipment and materials.

For a free copy of this guide, circle number 868 on the Reader Service Card.

Using ETV translators. Adler Electronics is distributing a folder which explains how television translators are used in reception of signals from distant stations. The translators are most effective in isolated districts, since they actually rebroadcast a signal from a point midway between the originating transmitter and the receiver.

For a free copy of this folder, circle number 842 on the Reader Service Card.

Film catalog. More than a thousand films are described in a new catalog being distributed by Coronet Instructional Films. Included is a series of five films on reading improvement, and a series of eight films narrating children's stories in French and Spanish.

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In the bus market? This 12-page brochure published by the Ward Co. lists its line of school buses. Complete specifications are given and many types of bus bodies are illustrated.

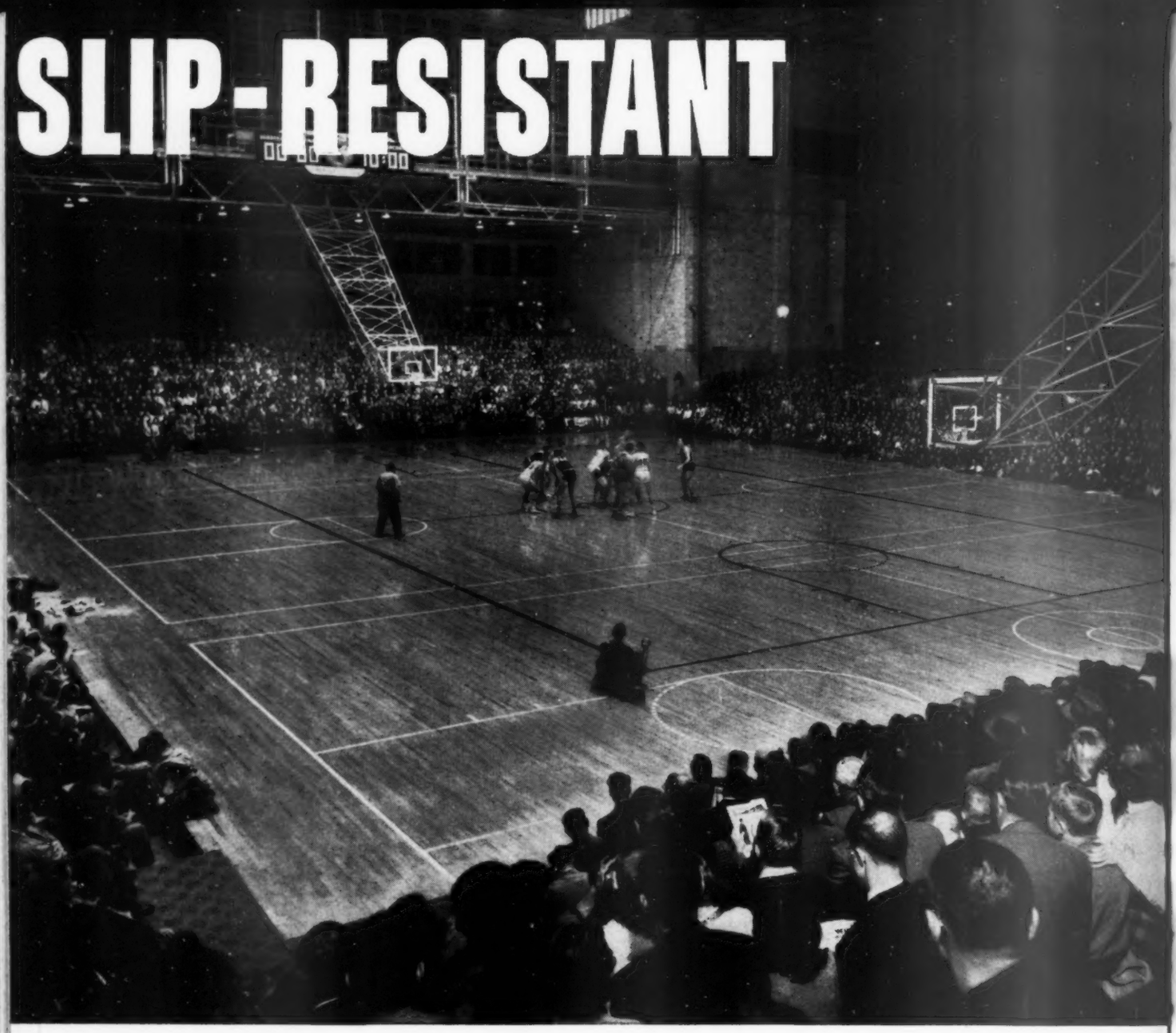
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Fluorescent lamps. Prices and other details of its line of ballasts for fluorescent lamps are included in a booklet available from the General Electric Co. Wiring diagrams and replacement instructions for obsolete ballasts are also included. One section of the booklet covers weatherproof ballasts.

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More on wood schools. A booklet published by the National Lumber Mfrs. Association shows how wood

continues on page 136



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THINGS YOUR PUBLIC OUGHT TO KNOW

Basic information that schoolmen can use as part of a community education program

Some facts about portable classrooms

They cost less than permanent buildings, and can be shifted around to meet population bulges. But they have limitations. Here is how to find out what they cost and if they are worth using in your district.

■ ■ ■ What kind of a school building do you want? Probably the very best. What would you settle for in a pinch—particularly if you need space fast? Undoubtedly the most you could get for the right price, without hurting your educational output. That compromise—and it is a compromise—is the reason why portable classrooms are still a strong factor in schoolhouse construction all over the nation.

Case histories in Albuquerque, Philadelphia, Dallas and Los Angeles show that portable classrooms or temporary buildings have helped those cities to match the mushrooming student boom. (*See SM, Feb. '58, page 26; Sept. '60, page 58; and Dec. '60, page 18.*)

But there is little real enthusiasm among users. Schoolmen warn that the inherent danger in using temporary buildings is that they tend to become permanent. They admit that they work, but they see them only as a temporary expedient for a temporary problem. They are a supplement, *not* a substitute, for regular school buildings, and they should not be thought of in terms of money savings alone. Their greatest value lies in alleviating emergency situations.

Portable schools for portable people

The pupil population explosion shows no signs of letting up. But the boom does move—from one area to another, from one town to the next, or even within a town itself. What good is a new school if the students move elsewhere? And who's left holding the bag?

Portables are best employed to keep pace with this state of flux. They can be shifted whenever and wherever necessary. They can prevent over-building or double sessions. They are compact enough not to be a site problem. They are not difficult to maintain.

Types of portables vary with their need and design. They are single or multi-roomed. They are made of wood or metal. Some are prefabricated. Others are, literally, "schools on wheels." Still others are trailers. Even wartime GI barracks, quonset huts or other "temporary" buildings are considered portables.

Philadelphia uses the six-room variety. Dallas prefers one-roomers. Los Angeles builds the bungalow type. Pasadena even moves foundations. Fairfax County, Va., has five-room "demountables," which it dislikes, and trailers. Albuquerque uses surplus Army barracks, which it hopes to discard this autumn after years of "checkerboard" operation.

Costs vary. Philadelphia spends $10,000 to $12,000 per room and $700 to furnish each portable. Dallas spends $3,500 per portable; its own staff builds them on precast concrete foundations. Fairfax County has spent $7,000 for trailers, and $13.30 per square foot for portables which it considers more costly than con-

CAN YOU USE PORTABLES?

Before you consider portable classrooms, you should be able to answer most of these questions with a "Yes."

	Yes	No
1. Will your school community tolerate portables?	—	—
2. Is your district large enough for them?	—	—
3. Can they be constructed adjacent to permanent buildings?	—	—
4. Will climate have an adverse effect on use of portables?	—	—
5. Are stopgap measures necessary in your school district?	—	—
6. Could your grade schools get along without special facilities?	—	—
7. Would your faculty approve of portables?	—	—

ventional buildings. Pasadena pays up to $13,500 per portable. Los Angeles pays $8,500 per portable room (including $1,000 for equipment), as against $15,000 for a permanent room. Portables average $2,000 to move, and cost about 7% more to maintain. But it takes 18 months to build a "permanent," and four months or less for portables.

Comparative costs

A recent comparative study in Los Angeles* shows the average cost per square foot of a portable is $7.84 to $13.22 for a "permanent." In the past few years, the district has spent $2,550,000 for 389 portable classrooms as against $1,667,000 for 140 permanent classrooms.

Costs of converting portable classrooms into permanent ones vary from $3.38 to $14.18 per square foot—based on their condition, remodeling, refurbishing, site preparation, and educational requirements needed. Los Angeles finds that average converting costs are extremely high.

Average costs to move portables from one site to another range from $1,048 per room for a six-room group, to $2,908 for a single room. It is Los Angeles district policy to relocate portables only where additional facilities are already on hand for a music teacher and a library, and where additional space for further expansion is available.

The use of portables varies widely today in California —a highly "portable" state—from only 1.5% of districts of less than 150 ADA to more than 83% of districts with more than 10,000 ADA. Most are in dryer, warmer climates, where there is less need to worry about weather or heating problems and their resultant higher costs. One-sixth of all schoolrooms in Los Angeles' city district are portable. One-third of all area districts use them—an indication of mushrooming growth around a major city, and how school managers keep pace with demand for more classrooms.

What district users say

There are certain things upon which all portable users agree:

1. They should not be considered permanent structures nor used as such. The more you put into them for permanency, the more they cost, and the harder it may become to "sell" the public a bond issue for conventional new schools.

2. They are better used for elementary schools. They can't serve as well the special needs of high schools. However, it is interesting to note that Van Nuys, Calif., uses portables in its junior high school program.

3. Non-classroom facilities—administration, service, sanitary, and multi-purpose units—should be in permanent buildings. However, teachers in the lower grades prefer sinks in their rooms so their young charges can scrub off paint or clay without going outdoors. These are usually not available in portables.

4. They should be located next to permanent buildings. **End**

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* "Comparative Costs and Utilization of Permanent and Transportable Classrooms," by Francis D. Largent, School Planning Laboratory Research Report No. 2, Western Regional Center, Educational Facilities Laboratories, Inc., Stanford, Calif.



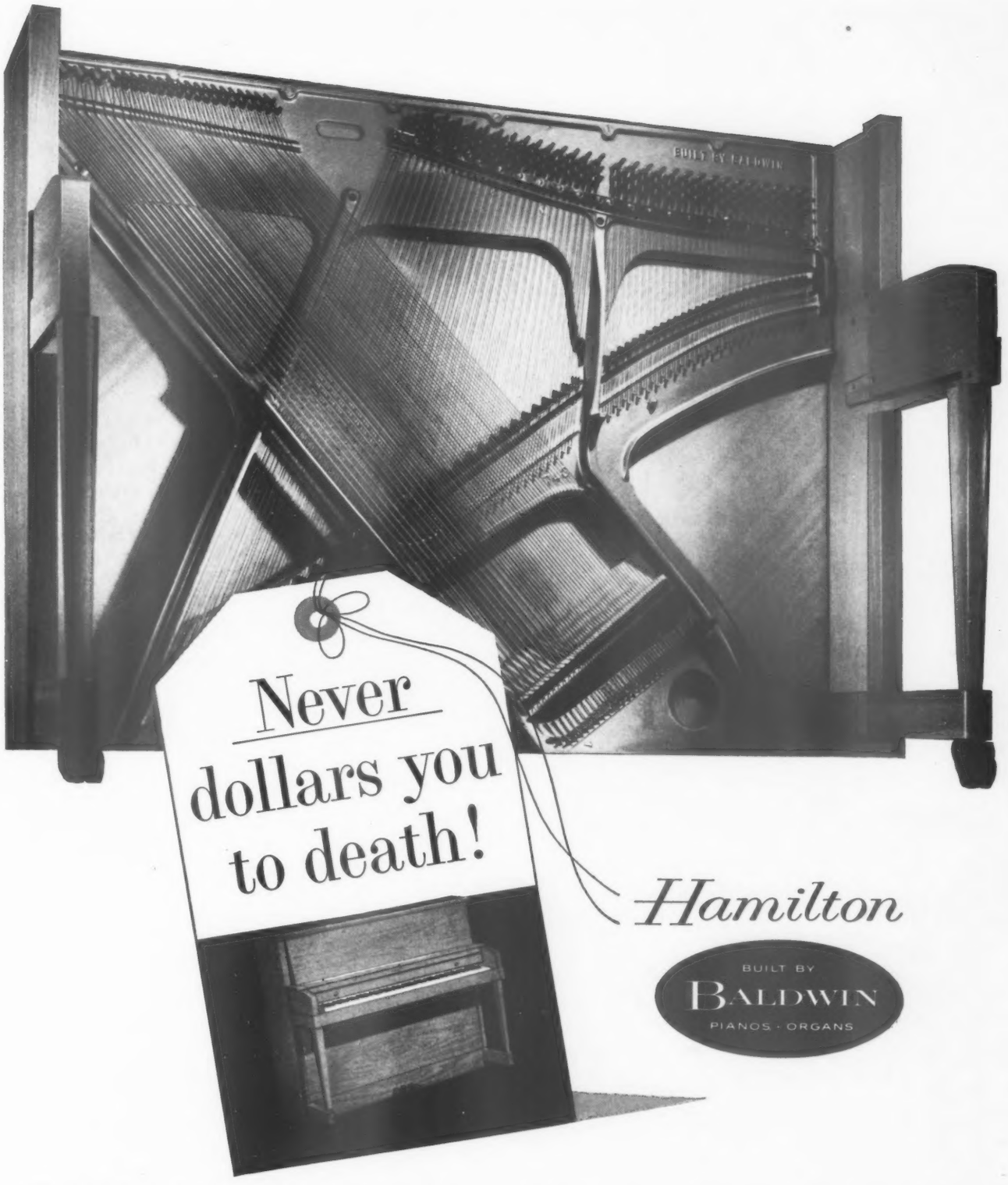
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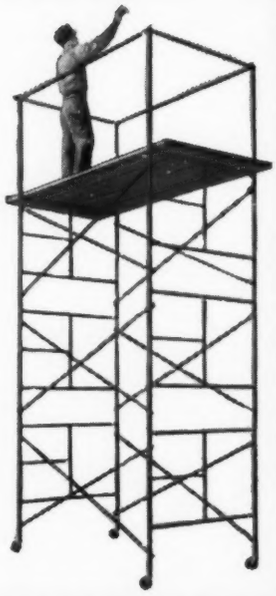
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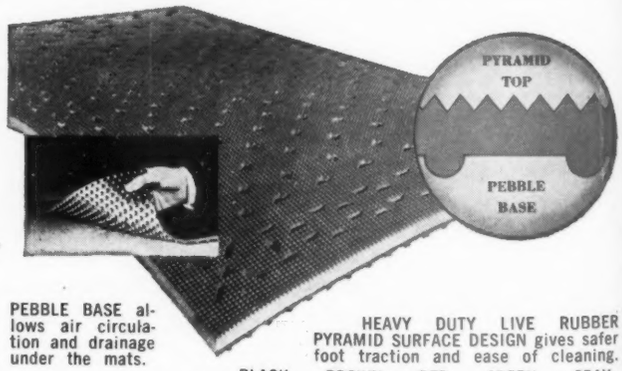
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You can't afford "second best" safety in a school bus chassis . . . not when the safety of your school children is involved. All school bus chassis are not alike. Before you make a purchase, we urge you to make a careful analysis.

Dodge school bus chassis are built for maximum safety. Frame side rails are extra-deep. Cross members are double-width. Dodge brakes are extra-large for longer life and greater safety. The parking brake is on the transmission. It is completely separated from the service brake for double braking protection.

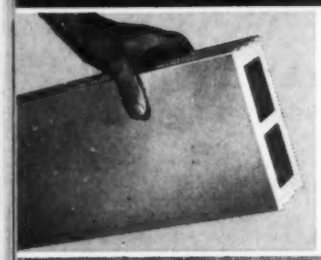
Dodge high-ratio steering provides positive control with a minimum of effort. Progressive leaf springing gives an excellent ride under all conditions. Fully loaded or running light, on city streets or rutted pavement, a Dodge school bus is always under control.

Every Dodge school bus chassis meets or exceeds the safety specifications of the National Educational Association code. And because they're so safe and sturdy their upkeep and maintenance costs stay low.

Dodge chassis come in five wheelbase lengths, powered by high performing V8 engines or the standard 251 cubic inch Dodge Six. And they are priced to compete with any school bus chassis. For full details, see the man who sells them. SEE YOUR DODGE DEALER.

(Circle number 781 for more information)

NATCO VITRITILE COMBINES BOTH BEAUTY AND DURABILITY IN MODERN WESTLAKE SCHOOL



NATCO VITRITILE is available in three nominal face sizes: 8" x 16", 5⅓" x 12" and 5⅓" x 8" in 2", 4", 6" and 8" thicknesses.



SOFT, RESTFUL effect is achieved in this windowless, inside hallway through the use of Natco Vitritile and artificial lighting.



BRIGHT, CHEERFUL walls of Natco Vitritile help to create a comfortable, friendly atmosphere for all who enter the main concourse of the modern Westlake Junior High School near Erie, Pennsylvania. Architect: Nelson, Goldberg, Heidt—Erie, Pa. Contractor: E. E. Austin Co.—Erie, Pa.

Natco ceramic glazed Vitritile was selected for extensive use throughout Westlake Junior High School near Erie, Pennsylvania, for two very important reasons:

First, because Vitritile is a cheerful, colorful building product that is ideal for inside wall construction. It is available in a variety of brilliant, modern, *permanent* colors that will never fade. Cleansed periodically with common soap or detergent and water, walls of Vitritile will *always* retain their original "new look."

Second, because Vitritile is a durable building product. It is a *genuine*, load-bearing clay tile material and, thus, completely fireproof and capable of lasting for the lifetime of any building in which it is used.

Specify the beauty and durability of Natco Vitritile into *your* school building plans. Write for complete information.

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(Circle number 745 for more information)

NEWS OF THE SCHOOLS

A digest of current happenings in public education

French is their speech; now they're learning to teach

French-speaking nationals, snapped up by language-conscious schools during the last year, will have a chance to learn the techniques of teaching their language this summer under a program supported by the NDEA.

A seven-week institute, to be held at George Washington University, Washington, D.C., is expected to attract more than 70 teachers from across the nation. Native speakers of French will be taught new mechanical teaching techniques as well as advanced grammar. A symposium on French culture and history is also planned.

About 15 certified teachers will be used to show the techniques of teaching to the 70 who know the subject being taught.

Free student parking costs Denver a school

Denver, Colo., could build at least one extra elementary school for the cost of providing free parking for the district's high school students.

This fact became apparent when Superintendent Kenneth Oberholtzer reported to his school board that buying and preparing parking spaces for 3,257 student cars had cost the district almost $700,000. This is in addition to annual maintenance and supervision costs of $21,543.

Oberholtzer had prepared the report as the result of a citizens' committee suggestion that students be charged for their parking spaces. The superintendent estimated that an $18 per year fee would be necessary for the district to break even.

In making his report, Oberholtzer defended the present plan because the district does not provide buses for high school students. If they don't drive, they must use public transportation.

He opposed a parking fee because it would be difficult to collect and many students would choose to park on the streets surrounding the schools, causing annoyance to the neighborhood people.

The possibility that students be encouraged to walk or bike to school, as in Europe, was apparently not considered.

A battle is lost, but the war is won

A New Jersey mother lost a battle with her local school board but, in the war that followed, she won.

Mrs. Jean Jost, a former resident of New York City who wanted to get away from it all, moved to the top of a New Jersey mountain with her family, including three teenage children. The Jost house was far off the beaten track, and school authorities refused to arrange a bus pickup for the children.

Having lost this battle, Mrs. Jost tried driving the children to school herself but she found that an intolerable expense. Then she really went to war.

Step one was to buy a bus. She got one for $1,500. Step two was to bid for—and win—a four-year contract at $215 per month to operate a school bus line. Step three was to take a bus driver's test which she passed on her second try.

Now the Jost children get door-to-door service every day—along with 31 other students.

Eighth-grade graduations dropped to cut drop-outs

A school district in Tucson, Ariz., will try ending eighth-grade graduation ceremonies next year, in an attempt to cut the drop-out rate. Board members in the Sunnyside district took the action after being told by Superintendent John Herrera that the schools were losing about 22% of their students between the eighth and the ninth grades.

Board President Ray Streich said formal graduations tended to make a sharp break that encouraged borderline students to leave school. Although the board's action will not go into ef-

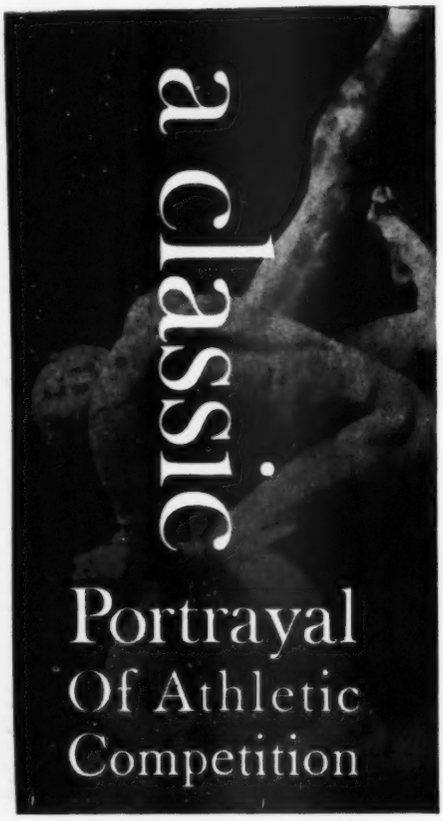
Too good to miss . . .

Socked . . . Ever had that feeling of wanting to sock something or someone? Students in East Mecklenburg, N.C., have a remedy for letting off steam. The school's Hi-Y Club tows an old jalopy onto the campus during exam periods and gives students and teachers a chance to swing at it—for a price. It costs a dime to work off a little frustration, 15 cents if you're really mad.

Docked . . . When an 11-year old was docked five points on a perfect spelling test, he looked for an explanation on the returned paper. It was there all right. The teacher had written: "Not neet."

Blocked . . . Schoolmen in New York City feel they're going to be blocked when they try to carry out instructions for action during a "neighborhood disaster." The school administration sent out a two-part instruction sheet. One part advises where school personnel can find the proper telephone numbers to call during an emergency. The other part reads: "The school telephone may NOT be used by ANY person for outgoing calls of any kind during an emergency." All clear?

Crocked . . . Well, no one was really drunk, but an elementary school principal in Milwaukee is feeling a little wobbly following a recent bout with student realism. Seems a student wishing to illustrate a project on Russian dining habits had contributed a bowl of punch—liberally spiked with vodka.



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(Circle number 754 for more information)

fect until June, 1962, questionnaires have been sent to parents of this year's eighth graders asking their opinion on dropping the exercises this spring.

LPs—something new for high school curricula

The trend toward LPs is growing. First it was in the record industry—longer play. Now it's in the high schools–longer programs.

At least that's the idea of Harvey D. Moore, supervisor of secondary education for Carbon County, Utah.

Moore proposes fewer classes but longer ones. His goal: three 100-minute class periods per school day—two before noon, one after noon—in which only the required "solid" subjects would be taught.

Classes would let out at 2:40 p.m., after which there would be 50 minutes available for teacher consultation, tutoring, or the extracurricular classes —band, orchestra, chorus, speech, debate, drama, dance.

Sports programs wouldn't start until 3:30 p.m., thus moving them out of "prime time" so as not to interfere with academics.

"The 100-minute class would be a challenge to the teacher," he says. "It would require good programing to keep the attention of the class . . . On the other hand, in the 40-to-50-minute periods prevalent now, by the time a teacher can get through the mechanics of class organization and roll call and review the previous lessons, she seldom has more than 10 to 15 minutes to give new material before it is time to make an assignment for the next day."

Moore insists, "The extended class-time would give teachers opportunity to get into the meat of their subjects, and let the class work as a whole, in groups, or individually, on a greater amount of material."

Maybe it's the magnitude, not the statistic

There may be a shortage of 135,000 classroom teachers in the United States, but it's not until you bring this figure down to the personal level that the statistic means much. Then it becomes a real and worrisome thing.

For 175 students in New York's Evander Childs High School, the loss of their math teacher dooms them to a year of inadequate preparation for regents tests and college entrance exams, an increased rate of failures, poorer grades and a sense of frustration.

About half-way through their current term, their math teacher became ill and had to give up teaching. No adequate replacement could be found. Five classes were affected—two in algebra, three in geometry.

Tied in with this problem is the question of available time of other teachers at the same school. One expert mathematician, teaching at the school, could have absorbed the work

Look what they're doing...

Safety belts for buses

■ **Safety belts** are being tested in the East Meadow, N.Y., school district for regular use in standard 60-passenger buses.

The idea originated with State Senator Edward J. Speno, chairman of the New York State Joint Legislative Committee on Motor Vehicles and Traffic Safety and a district resident.

Twenty "three-in-one" nylon belts were installed at $10 apiece. The belts are supposed to withstand a 6,000 pound thrust.

East Meadow has used similar belts since 1954 in special vehicles for the handicapped.



This chair was sentenced to a year of punishment

Summer's sun won't fade or faze it... winter's worst weather won't crack or craze it. Impact testing at 40° below zero wouldn't break it. Virco's new #867 chair is virtually indestructible. A year of torture testing—including over 50,000 cycle life testing—has proved the strength of the 867 and its MARTEST plastic seat and back.

MARTEST, a plastic with a propensity for taking punishment, is molded in our own new plant and is coupled with a heavy gauge steel frame. And MARTEST has at least two other advantages: It caters to student comfort, and it pleases school budgets by lowering the price of plastic to the cost of wood.



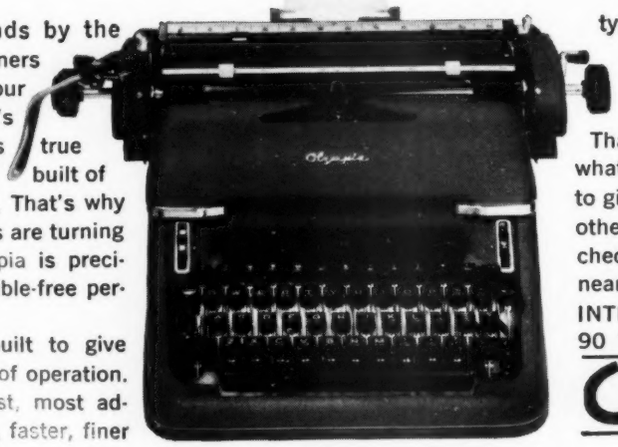
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Basketball rained out

Ever hear of a basketball game being rained out? It happened recently in McAdoo, Pa. A crowd of 600 students and parents crowded into the high school gymnasium for the McAdoo-West Hazelton game. The gym, built to accommodate just 300, soon became overheated.

The next step was obvious: Someone opened a window, bringing in the cold air from the outside.

Now, as those pretty young ladies on television are always telling us, "you know what happens when a cold front meets that hot moist air. It rains." And rain it did—right in the middle of the McAdoo gymnasium. Result: Game called because of inclement weather—inside.

load; but he was kept busy otherwise with such chores as "cafeteria manager" for two of his five teaching periods.

Principal Hyman Alpern said principals for years have urged that outside help be hired for the non-teaching jobs, such as cafeteria patrol.

Teacher quits, cites "abuse" of candidates for board

Irked at "ignorant abuse" of the system by school board candidates, a West Springfield, Mass., teacher has resigned. The board withheld his name. Superintendent Chris Grammaticas said the teacher wrote, in part:

"The attitudes of certain 'publicity at any cost' aspirants . . . while running down all sincere efforts at good sound educational practices . . . make it impossible for me to continue teaching and living in this school system . . .

"The respect of my profession is held high in my mind, but after such public abuse I find it difficult to face my family—to say nothing of friends and neighbors.

"I challenge the responsible ones to name another profession . . . where highly qualified persons must seemingly take such abuse from such poorly qualified abuse collectors.

"Being a taxpayer and homeowner . . . I recognize the importance of a low tax rate . . . On the other hand I feel defiant of, and do not adhere to, the philosophy, 'Let's keep our tax rate low at any cost' . . .

"I cannot . . . continue to think that I must raise my family in such a poor environment where ignorant abuse goes unabated."

The teacher said he hoped that "in the future someone will stand up for our teachers, for somehow they are public servants and society will not allow them to defend themselves."

School board wants to know more about prep sports

High schools always have been bothered by the extent to which some college recruiters will go to secure the services of an outstanding athlete, but in Dade County, Fla., the shoe is on the other foot.

It's the high school coaches who are doing the prowling, some even to the extent of wooing promising grade school and junior high school stars.

The question of recruiting came up as the Dade County School Board ordered a thorough study of high school athletic procedures including emphasis —or lack of it—on major vs. minor sports.

The Miami area probe, urged by Trustee Robert S. Butler, was ordered after parents of basketball players at Edison High complained that "unfair pressure" was put on their youngsters to play football.

Mrs. Helen Vosloh, another board member, suggested that the board consider boundary lines for each school district, to discourage recruiting activities.

Curb on night activities proposed for students

Too much night life in your schools? Maybe it's time to crack down, hard.

"Organized activities are sapping the energy and siphoning off the attention of many students," according to Charlton Myers, president of the Ohio School Boards Association.

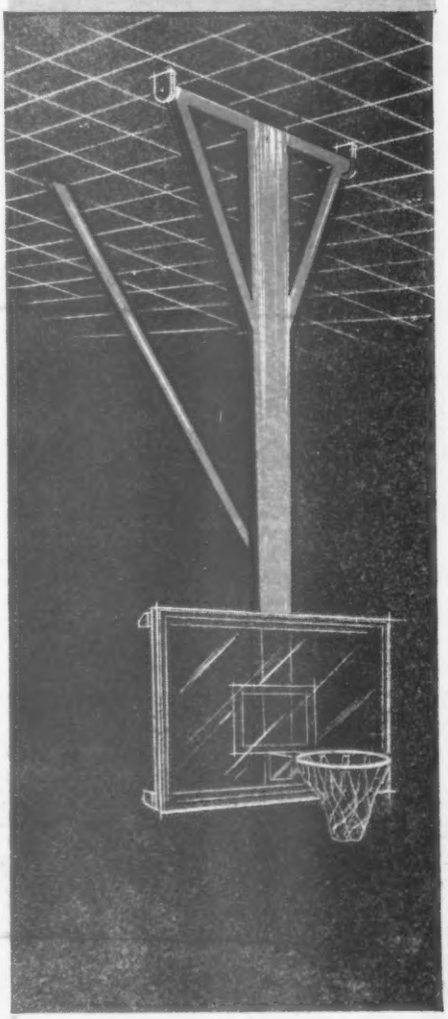
His main targets: Athletic teams and bands. It's not the way they play, but the way they behave next day, he observed.

"Many students," he said, "are too tired to concentrate as a result of organized school activities. Others are too excited to give attention."

Myers singled out the prolonged basketball season, lengthy band trips, even football in junior high schools. He blamed parents for helping to con-

text continues on page 61

NEW FROM PORTER

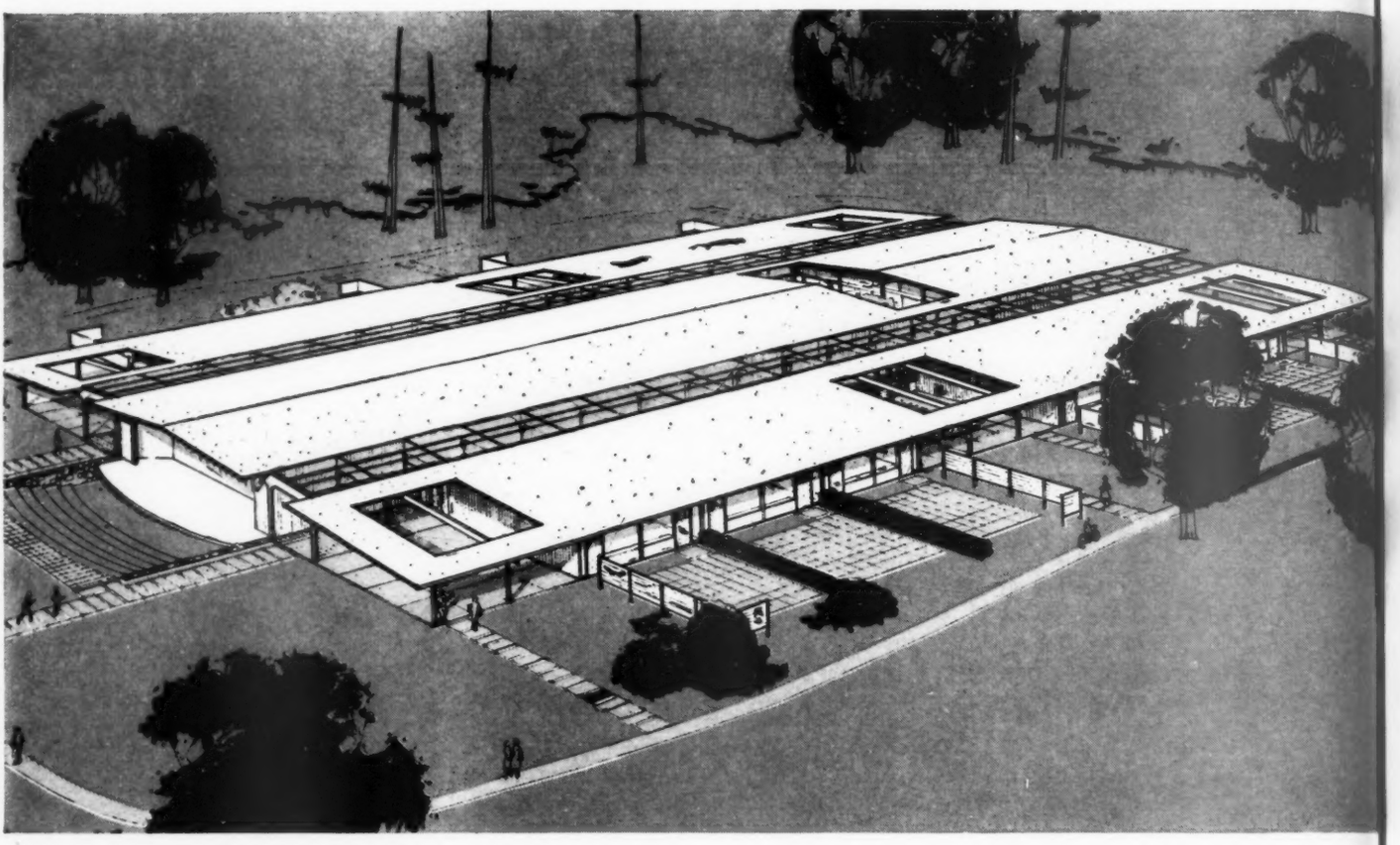


NEW "LINE 100"

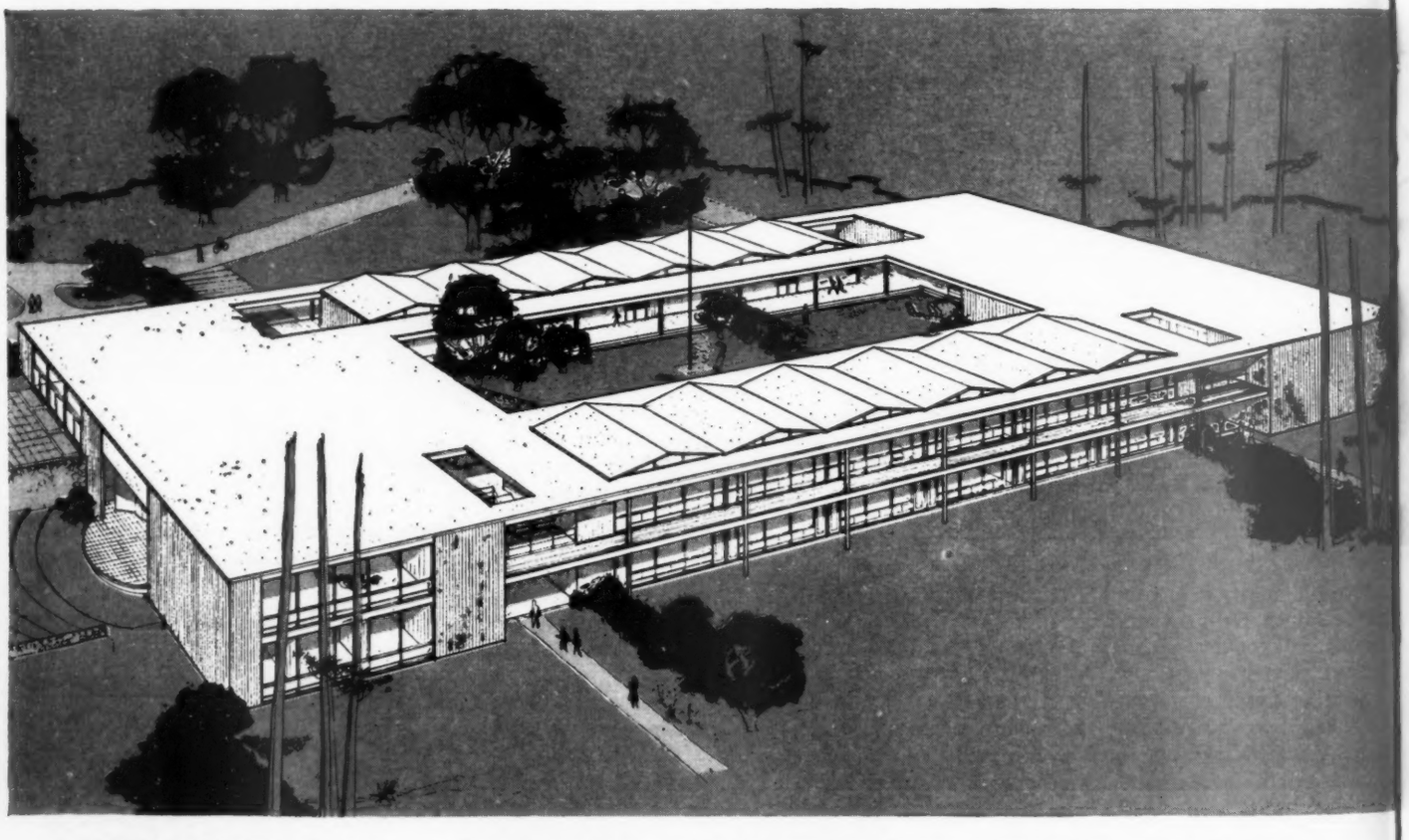
Now — clean, functional basketball backstop design . . . rigid construction . . . dependable remote operation. And it's from Porter . . . over 150,000 backstop installations . . . 50 years of experience in making backstops. For complete information on Porter's New 100 Line, our Deluxe 200 Line and new Economy 300 line, write today for new Basketball Catalog.

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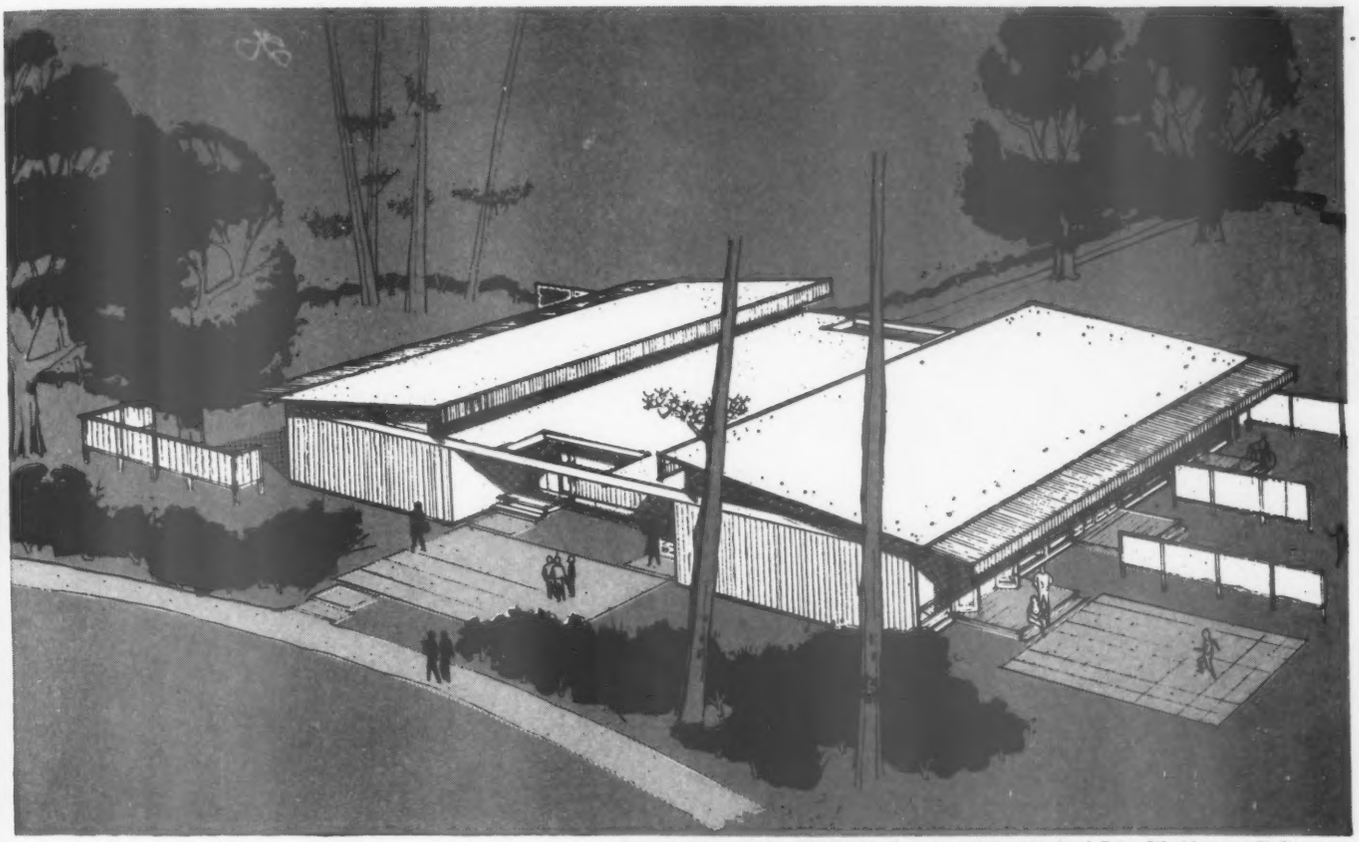
(Circle number 753 for more information)



COMPACT SCHOOL of wood . . . designed and developed, like the other two prototypes pictured here, expressly for NLMA's new *"Blueprint for Better Schools"* book. All elements of this model junior high school are grouped tightly together for best efficiency and economy. Classrooms, surrounding a central core of multi-use facilities, have individual exits to outside patios. Book includes concept floor plans, elevations, alternate cross-sections, wood construction details.



HILLSIDE SCHOOL of wood . . . planned as a junior and high school structure on gently rolling terrain. Classrooms, two stories deep on the downhill side, flank a landscaped activities quadrangle. Gymnasium wing is at far end of building, a library, cafeteria, and auditorium at near end, with stage that reverses to face outdoor amphitheater. Roof treatment is of unusual interest. *"Blueprint for Better Schools"* book gives concept floor plans, sections, elevations, wood construction details.



Schools designed for NLMA by Cooper and Auerbach, A.I.A., Washington, D.C.

PAVILION SCHOOL of wood . . . an economical, highly functional structure consisting of six classrooms and a common room. Units like this, following a campus or courtyard plan, can be arranged in clusters around a central facilities building (which may already exist) to provide and add classrooms as needed. As in the other two school models shown, exterior and interior construction make the best use of wood in many new ways, graphically detailed in the *"Blueprint for Better Schools"* book.

Blueprint for a new generation of

better schools...of WOOD

Like traditional teaching methods and curricula, traditional ways of building schools are being re-examined. The happy end result, in many communities, is a bigger and better school for a lower investment . . . the ultra-modern, one-story school of *wood*.

In many other new schools today, more and more wood is being used to advantage in siding, paneling, flooring, furniture, and cabinetwork. In any school, wood is uniquely at home . . . because it makes students and teachers *feel* at home. Wood's familiar *environment for learning* is naturally more relaxed and reassuring.

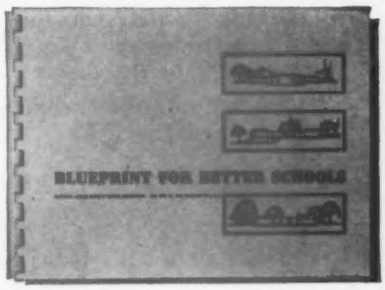
Wood wears well, too, in the physical sense. Maintenance costs, remodeling and expansion costs are remarkably reasonable. Each year confirms the soundness of the structure . . . the soundness of your planning decision.

The more *wood* you use in a school, the more *good* school you build for each tax dollar.

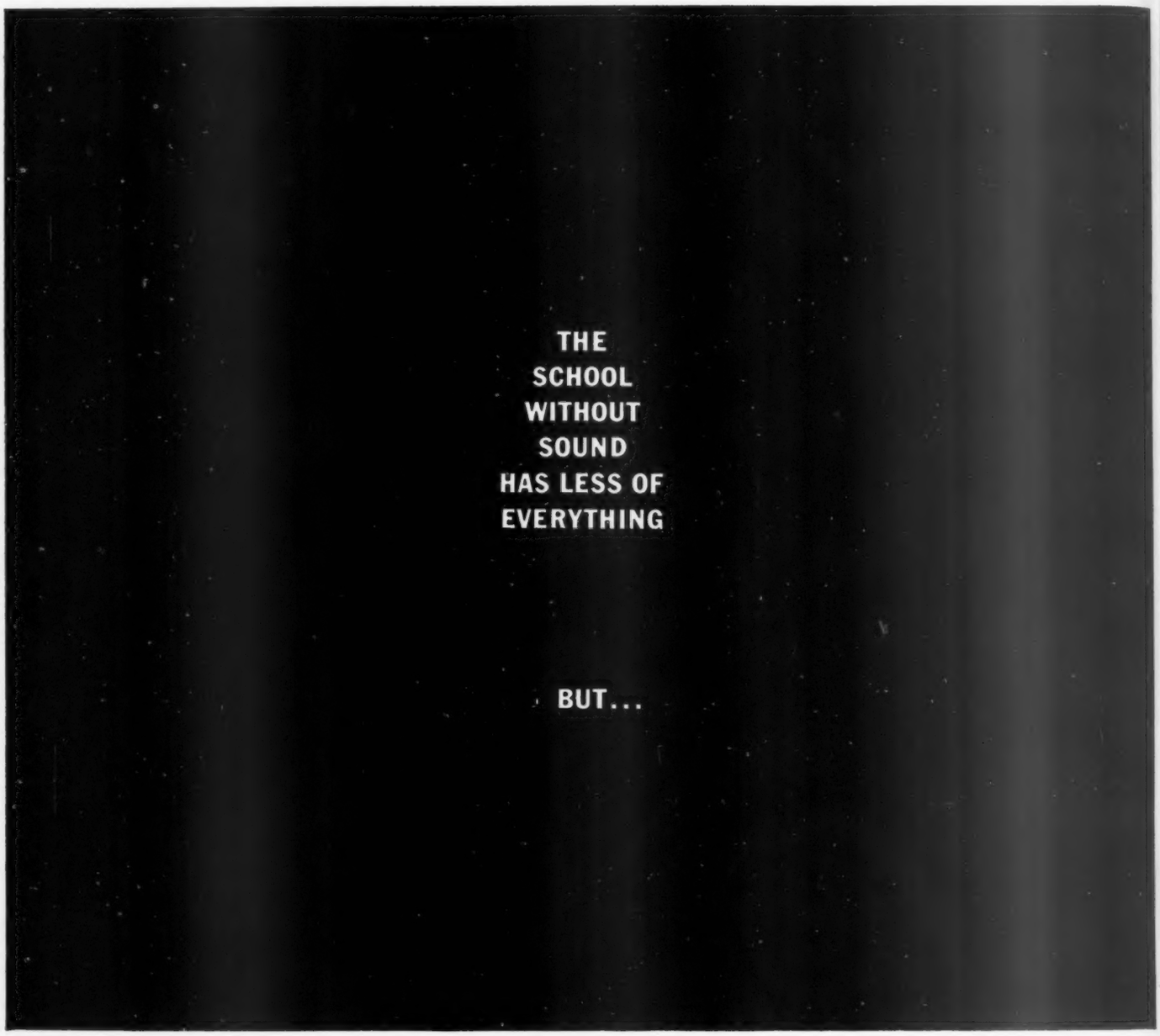
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Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.

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WRITE NOW for NLMA's complete school planning kit, including new "Blueprint for Better Schools" book, 5 booklets of wood construction data, 8 other booklets on wood use in schools. Ask, too, about a special showing of NLMA's new 22-minute color motion picture on school planning.



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STROMBERG-CARLSON
A DIVISION OF **GENERAL DYNAMICS**

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tribute to the maintenance of these programs.

"Unfortunately, we are passing through a period in which many parents who should know better, and who want to be good to their children, forget their moral duty to rear their offspring and confuse the gift of a motor scooter with the gift of good home training," he said.

Myers commented on basketball: "A long season . . . followed by tournaments within tournaments, accompanied by distraction, suspense, elation and depression."

On band trips to such places as Washington or Atlantic City: "A 'good cause' seems to justify almost anything. They seem exciting and desirable. But this is not education . . . not travel. It is adventure."

New school uses plastic for frontal design

Schools of the future may have plastic walls. The first high school of that kind is scheduled to open in September in Stamford, Conn. The whole front of its main two-story academic building is of fiberglass plastic.

Porcelain enamel panels and glass "vision strips" break up the solid look of the curtain wall. Basically, the idea stems from use of plastic materials in industrial skylights. There is an aluminum core with fiberglass plastic on

Precipitation blues

It may have been condensation in McAdoo (see page 57), *but that wasn't the case in Winnebago, Minn. There it was just a plain old leak.*

When water kept appearing on the gymnasium floor, Superintendent George Eitreim was pretty sure the roof leaked, but the contractor said no. He blamed the puddles on "condensation."

Eitreim, a resourceful man, wasted no time in idle argument. He went to the school art department and had a batch of blue dye mixed with 25 gallons of water. The concoction was then poured over the gymnasium roof.

When the indigo evidence began pouring through, the contractor capitulated. He's agreed to fix the roof—to keep out that "condensation."



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Why the SLANT-O-MATIC is a big hit with teachers

Today, half of all machines bought by homemakers are zig-zag machines. It's the big trend . . . and growing!

Now's the time for students to learn the new zig-zag techniques they'll use in the future—how to overcast, blind-stitch hems, make buttonholes, sew on buttons, and how to handle jerseys and tricots.

Zig-zag sewing is simple to master, and easy to teach, on the classroom-sturdy SLANT-O-MATIC* #401 machine. Made in America by SINGER, the only company which makes household zig-zag machines in the U. S.

Time-saving and decorative zig-zag stitch patterns are selected by "tuning" the dial. The stitch chart and threading charts are *printed on the machine.* Most parts and accessories are interchangeable with the #404 straight-stitch Slant-Needle Deluxe.

A word about service. On request, a SINGER repair man will clean, oil and make simple adjustments to SINGER classroom machines, free of charge. Another reason SINGER* machines are classroom favorites!

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Listed in your phone book under SINGER SEWING MACHINE CO.

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(Circle number 768 for more information)

either side, with air space between each layer.

Why plastic? Kenneth Mitchell, partner in the New York architectural firm of Urbahn, Brayton & Burrows, offers a variety of reasons:

1. It's a cost saver to install and maintain as time goes by. The installation price of $3.25 per square foot is low. You can "rebuild" damaged sections after five to 10 years' use by spraying as you would a coat of paint. It is self-cleaning.

2. It's a heat saver. The curtain wall is 1 9/16 of an inch thick, but it insulates like a 12-inch masonry wall. Mitchell estimates it should save 30% on the heat load of the entire building.

3. It's functional, esthetic, nice to look at, practical and efficient. It is both transparent and translucent. It reduces the need for costly drapes, curtains and blinds.

Board backs spanking of 27; parents beat retreat

It's all right with the Fair Grove, Mo., school board if a teacher wants to spank a child—even if 24 teachers paddle 27 students. That's what the parents of the 27 were told after protesting to the board. They beat a hasty retreat.

The teachers had announced they would stay away from school if the chastised boys and parents did not promise cooperation. The board supported the teachers, then called in the parents to tell them so.

The 27 were paddled because they left school grounds without permission. One parent contended the boys were beaten too harshly. He displayed a large maple paddle which had been split. He said 10 such paddles were broken in the spankings. The teachers denied this.

As of now, the parents have pledged that their sons—all of them—will behave, or else. Apparently the youngsters weren't the only ones whose feelings were ruffled.

Grammar schools urged to adopt new program

Looking for something new in grade school programing? "Follow Amidon," Superintendent Carl F. Hansen has advised all elementary principals in Washington, D.C. He's talking about the new Amidon School's emphasis on organized instruction and rigorous discipline.

Though less than a year old, the new school's program has Hansen's solid backing. He says it combines the

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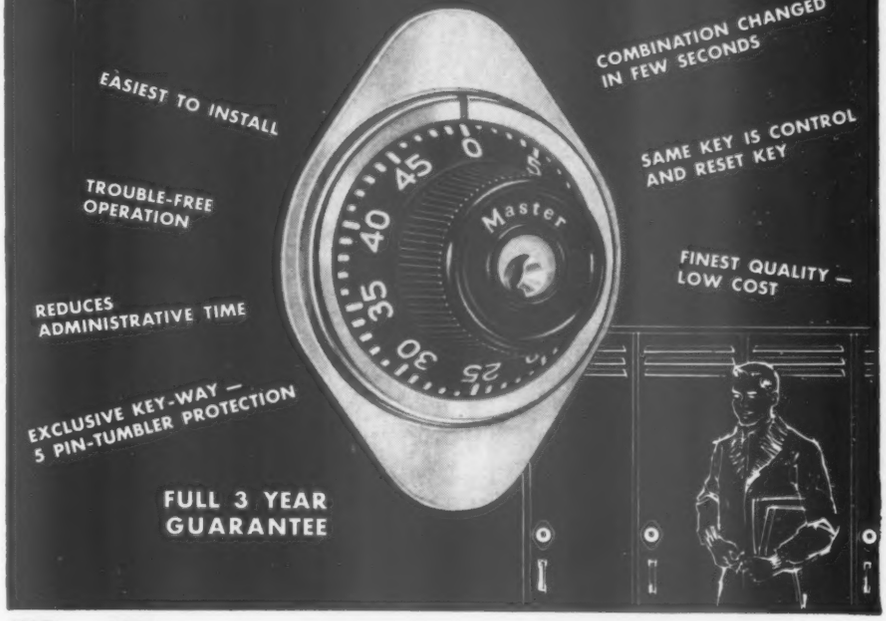
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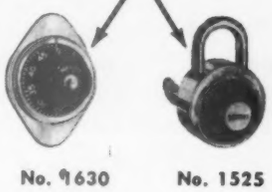
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best features of "old-fashioned" and progressive methods. He particularly favors the use of phonics instead of sight reading.

He lists these nine key points in the Amidon plan:

1. Stepped-up emphasis on reading instruction by phonics, beginning in kindergarten.

2. Allotting prime school time to the basic subjects of reading, writing, spelling, speech, arithmetic, science, geography, history.

3. Assigning basic textbooks in these subjects to every pupil for use at home as well as school.

4. Scheduling of organized instruction in U.S. geography in the fourth grade, U.S. history in the fifth grade, and world geography in the sixth grade.

5. Requiring many written assignments to be checked and returned to the students for correction.

6. Direction of lessons to large groups wherever possible, with the teacher to "instruct, not simply hear recitations."

7. Extensive instruction in speech and composition at each grade level, including creative writing, memorization and oral reading.

8. Systematic teaching of formal grammar starting with the fourth grade.

9. Scheduling "supposedly more difficult materials" earlier in the grades than has been the practice.

Students combine classes, on-the-job retailing sessions

Senior students of retailing at two high schools in Phoenix, Ariz., take 15 hours per week of supervised on-the-job training in addition to their regular academic programs.

Their career training in local retail, wholesale and service establishments supplements their classroom studies of the principles of distribution, selling techniques, merchandise information, advertising, display and human relations. They are paid for the time they spend on the job and receive academic credit for it, too.

Both the school and business aspects of the Phoenix distributive education program are closely supervised and coordinated. Program coordinators make frequent visits to participating business firms. They determine further training needs and obtain businessmen's evaluations of the cooperative plan. Students are also requested to give evaluations of the program every six weeks.

The Phoenix program has grown from an enrollment of 30 students last year to more than 100 now. An advisory committee, composed of local businessmen and school personnel, is currently working to strengthen the program. It helps to determine community needs, selects and places students, advises about improving coordination of the program and takes an active part in public relations efforts.

Why Johnny can't

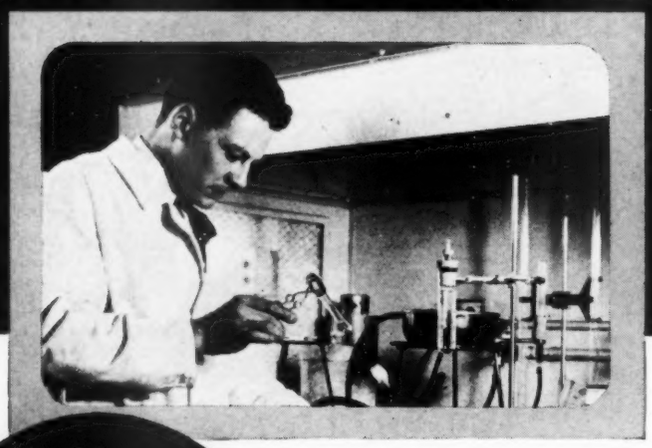
In Compton, Calif., schoolmen now know why Johnny can't read. He can't figure out what he's supposed to be doing.

Reading, according to a publication put out by the high school district, is being defined as "A processing skill of symbolic reasoning, sustained by the inter-facilitation of an intricate hierarchy of substrata factors that have been mobilized as a psychological working system . . ."

And we thought it was just a matter of putting letters and words into the proper place.

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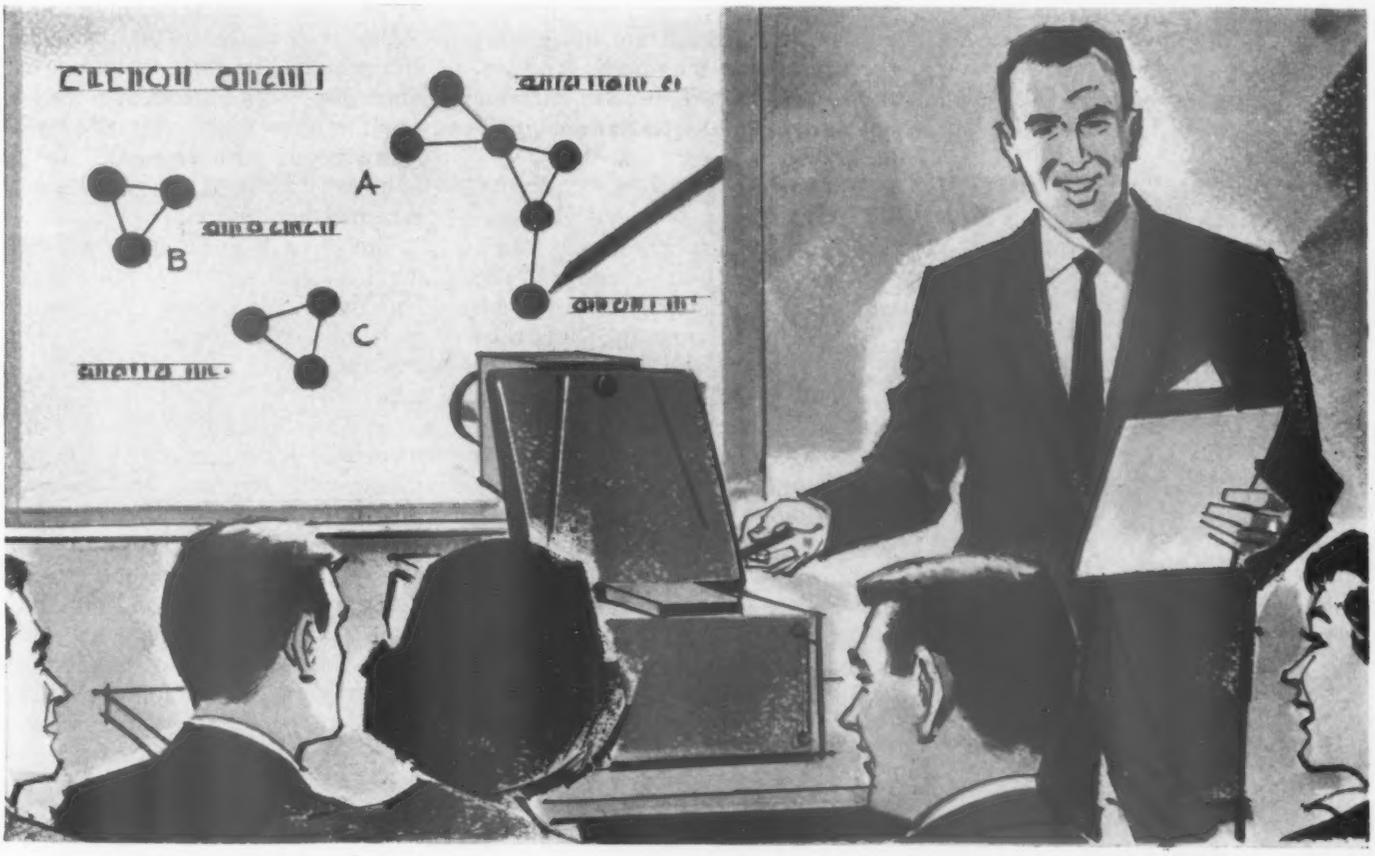
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How to supervise your principals

A principal should not be the superintendent's errand boy, but neither should he be an absolute monarch. Here's how Covina, Calif., supervises its principals—without taking away their authority or independence.

■ ■ ■ Chances are, the principals in your district are not getting the supervision they need. And yet, they are the key figures in carrying out your district's educational policies.

Ellsworth Tompkins, executive secretary of the National Association of Secondary Principals, told a SCHOOL MANAGEMENT editor, "The way he [the principal] does his job —the help he has, the duties he must perform—will make or break the educational program any school system can offer." (*See "What should you demand of a high school principal?," SM, Sept. '60.*)

Dr. James B. Conant thought the principal so important that he admonished superintendents that they had a "heavy responsibility . . . in finding and appointing the right people to these posts."

But what actually happens, in the average school system, once principals are found and appointed?

Supreme beings?

There is common agreement that a principal should be supreme in his school. The building is his, and, in theory, no good superintendent would ever arbitrarily impose his authority over that of the principal. If a principal becomes nothing more than the superintendent's errand boy, he is no longer effective as an instructional leader—and it is doubtful if he is of any real value to the man he is serving.

But there is a difference between making a man supreme in his school and giving him license to do with it as he pleases. Principals, like everyone else, need help, guidance, and supervision.

In Covina, Calif., elementary and secondary school principals are subjected to a rigorous and vigorous program of training, inspection and supervision. They must be prepared at any time to explain what they are doing in their schools and how they are carrying out district policy. They are expected to keep up on all phases of the instructional program.

The object of this supervision is not to hold principals in check—or even to make sure that they are carrying out their jobs properly. The object is to give them any help and guidance that they may need.

Covina's program is under the supervision of Lee Newcomer, as-

sistant superintendent for educational services. Until last July, Mr. Newcomer worked directly with each of the principals in his district. This year, as a result of unification, he works through directors of elementary and secondary education.

In the following tape-recorded interview, Mr. Newcomer tells how Covina supervises its principals, how it trains them to do a better job and what his district expects each of its principals to accomplish.

Q When do you bring new principals into your schools? What time of year do they start?

NEWCOMER: They're on a 12-month contract starting July 1. For principals new to the district, July is completely devoted to orientation to the district and in-service training for specific aspects of the job that are somewhat unique to Covina. We don't believe a man is ready-to-go as a principal just because he's been hired after a rigorous selection process.

Q. What would your summer training include?

NEWCOMER: We run a summer school. We use this to train principals to do classroom visitation, observation and evaluation. We feel this is one of the basic jobs of the principal. He must learn to analyze the learning situation and be able to discuss with the teacher the objectives of the class and how she is attempting to achieve them. If a principal can't do this he cannot carry out the most important part of his job.

Q. When a principal goes into his new school, is he in sole charge of the building?

NEWCOMER: Yes.

Q Do you impose any kind of supervision to see what kind of a job your principals are doing?

NEWCOMER: Yes, in several ways. We recently unified this district. The principals are directly responsible to a director of elementary or secondary schools. (Prior to unification, they were directly responsible to me.) That means there is a person to whom they are responsible

"Supervision, good supervision, should be welcomed by any principal. If we want creative principals, it's essential that they know somebody is aware of the exciting things they're doing."



PRINCIPAL EVALUATION CRITERIA

ROLE:

Manager, organizer, and implementer
Related results:

1. Produces a school organization with energies, skills, and talents geared to achieving the goals and purposes of the enterprise.
2. Results in the principal's ability to clearly define and describe the organization of his enterprise in terms of plans, directions, control points, and analysis of results.
3. Results in attractive, neat, professional and businesslike atmosphere.
4. Results in high level of competence in carrying out tasks and meeting deadlines.
5. Results in a clear understanding on the part of all personnel as to whom they are responsible and for what they are responsible and what is expected of them.
6. Results in the effective implementation of district programs.
7. Results in efficient and effective utilization of available resources, both human and material, in the solution of school problems.
8. Results in a clear understanding and utilization of district organization, policies, procedures, and channels of communication.

ROLE:

Supervisor and evaluator
Related results:

1. Results in the systematic collection of data relative to the quality of instruction, extent of learning, and the achievement status of pupils in the school.
2. Results in the principal's ability to clearly define the strengths and weaknesses of the school enterprise in relation to the achievement of district goals and purposes.
3. Results in the principal having extensive knowledge of what is going on in the classrooms.
4. Produces within all personnel a clear understanding of the goals and purposes of the enterprise and clear understanding of what is expected from each person relative to the attainment of these goals.
5. Results in a careful and systematic accumulation of data relative to the effectiveness of school employees.
6. Results in the separation of incompetent employees.
7. Results in the principal's insightful understanding of the characteristics and the strengths and weaknesses of all employees.
8. Produces security and job satisfaction for competent employees.
9. Results in the principal exercising his responsibility to determine and define strengths and weaknesses in existing and proposed programs.
10. Produces high quality classroom instruction and learning.

ROLE:

Engineer of staff and public relations in school, district, and community
Related results:

1. Results in mutual respect and high morale among and between principal, school personnel, and pupils.
2. Results in mutual respect among district personnel and the efficient solving of inter-department and division problems related to the school.
3. Produces confidence in, loyalty to, and enthusiastic support of the school by community patrons.
4. Results in high standards of behavior of pupils throughout the school.
5. Results in the effective implementation of district personnel policies and procedures within the school.
6. Results in effective provision for pupils in need of special attention and services.

ROLE:

Instructional helper
Related results:

1. Results in the organization and development of a variety of in-service activities designed to help teachers improve themselves.
2. Results in extensive use of the principal as a source of information and guidance relative to instructional problems.
3. Results in much clearly understood communication between teacher and principal relative to the improvement of instruction.
4. Results in the principal being recognized as an effective instructional helper.
5. Results in the effective utilization of other available resources.
6. Results in a well organized readily available source of professional materials.
7. Results in continuous improvement of instruction.

ROLE:

Inspirational leader
Related results:

1. Results in a high degree of enthusiasm for achieving district goals and purposes and the maintenance of high standards for learning.
2. Results in clear and common understanding of the goals of the enterprise among all school personnel.
3. Produces loyalty and job satisfaction in successful employees.
4. Produces inspired teachers and inspirational classroom teaching.

and this person is responsible for their supervision and evaluation. Now, the controls are handled both informally and formally as I see it. On a formal basis, our controls are generalized policies and systematic visitations to see that these policies are being implemented.

Q. What do you mean by systematic visitations?

NEWCOMER: Three or four times a year, a memo is sent to each principal saying that my secretary will call to make an appointment for me to visit his school.

Q. Do you simply come in for half an hour and discuss in general what is going on, or do you have specific problems to talk over?

NEWCOMER: I spend at least a half a day, and sometimes a full day, in the school. I usually hit on some specifics. For instance, we instituted a new program for using reading labs. We carefully prepared our principals to implement that program. On one visit I asked them to describe to me exactly what they had done to train the teachers, and I asked to go out and observe this program in action in selected classrooms. On other visits I'm looking for more general information; for example, what steps a principal is taking to insure that children who deviate from the norm in certain characteristics are given equal educational opportunity. This is a highly general thing, but I'm really looking at this person to see if he is on top of his enterprise. Does he assume the responsibility for the education or does he just wait for pressure from his supervisor or parents? In other words, is he on the offensive or defensive.

Q. Isn't there some resentment over your invading the domain of the principal?

NEWCOMER: I think this depends upon the quality of the supervision. I'm sure there probably is resentment in some cases, particularly when a person is under the gun for not being too successful. However, I think many of our principals would say that for the first time they feel that somebody is personally interested in what they're doing. They have somebody to talk to. If we want creative principals, it is essential that they know somebody is aware of the exciting things they're trying to do.

Q Are your supervisory visits made to all principals or only to those new to the district?

NEWCOMER: All principals.

Q. Can you describe how a visit might operate?

NEWCOMER: It starts when my secretary sends out a memo to each principal saying that I would like to visit.

Q. Does the principal know at this time what you are going to discuss with him?

NEWCOMER: Yes. If I were merely attempting to ascertain their weaknesses, you might say that I would like to catch them cold. But we're not interested in exposing our principals. We want to make them more productive. So I mention those things which I'm particularly concerned about, that I wish to coordinate throughout the district. They have a chance to think about them and they are usually pretty well prepared.

Q. How many points might you want to cover in a day?

NEWCOMER: Sometimes there are two, three or four points. Other times there are as many as eight. Our director of elementary schools, who has taken over these visits this year, tried something rather unique. He put down all areas that he felt the principal should feel responsible for. I think it involved something like 20 items. All he did on his first visitation was to say, "What about this area of your responsibility, how do you feel about it, what have you been doing, or what are your plans?" And his technique was to make sure that the principal was aware of all the areas for which he was responsible.

Q. How long before you want to visit do you send out this notice?

NEWCOMER: It will probably be only a week or so before the first visit, but it will be a month and a half before you get to the last one.

Q. Do you cover more than one school in a day?

NEWCOMER: Only in a rare emergency would I do this. It's not advisable at all. In fact, I try to hit two or three a week. This is quite a drain on a person's time when you stop to think about it.

Q. Let's say that your secretary has called a principal and arranged for a visit. When would you arrive at the school?

NEWCOMER: Probably between eight and nine o'clock, very early in the morning.

Q. Do you go directly to the principal's office or do you start going through the school?

NEWCOMER: I don't ever go to a building without going to the principal's office first. The principal must be made to feel responsible and he can only be made to feel responsible if he *is* responsible. He shouldn't have a lot of people coming into his building trying to find things that might be wrong. But I don't believe in an organization where you say "You're responsible; run your show." The supervisory visit is a technique of control.

Q. Would you start by sitting down with the principal and discussing matters with him?

NEWCOMER: I usually spend the greater part of our time talking with him. We work very diligently on principals' keeping files of various aspects of their organization, so they know that when I ask about an area, I expect them to look in their files and show me the kind of things that they have done. As an example, I like to see copies of write-ups of supervisory visits to all probationary teachers. Or I might ask about those teachers who are coming up for tenure. Or I might inquire about the whole staff. Another thing I may ask is, "How many teachers do you have about whom you are really concerned?"

Q. Do you ever talk to teachers about the principal?

NEWCOMER: No.

text continues on following page



How to be a good school manager—

"Let's assume that the principal wants to be sure that all children who have physical defects are getting a full opportunity to get a complete education. What can he do to accomplish this?

"Many principals would say 'I have a problem here so I had better have a couple of workshops, or a faculty meeting, and bring all the teachers in and try to teach them how to do this job.' But why not assume the competency of your staff members until they prove to you they don't have competence in a particular area? Now, here is what we, in Covina, would expect our principals to do.

"Each principal has a nurse in his school. She is there part-time. The principal asks his secretary to send a memo to the nurse: 'I would like to have a list of all the pupils, by grade level and teacher, who have physical defects that may affect their learning.' Now, he has spent just two minutes.

"The nurse brings the list. The principal, when he gets this information, asks his secretary to send a memo to all of the teachers listing the pupils that they have that are on this list, with their disability. The memo says: 'Mrs. Jones, I'm sure you will want to know that you are going to have these children in your classroom and that they have these defects that may affect their learning. I'm sure that being aware of this you will take the necessary steps to plan for this particular problem.' Now, altogether the principal hasn't spent more than five minutes yet.

"When he makes his classroom observation a little later in the year, he has a folder for every teacher. He has put a copy of that memo in the folder. He goes into the classroom, opens the folder and notices that he sent a memo to this teacher informing her of some students in her class who have physical defects. This is the time to ask the teacher how she is coming along with her plans to see that these students have equal educational opportunities. At the same time, the principal can observe and judge for himself whether the job has been done properly. Altogether then, he has spent no time to speak of on this problem, but he has accomplished as much or more than the principal who runs to the nurse himself, then goes to each teacher, sits down and talks to them and generally gets himself into a lather.

"Here's another beautiful example of the management technique that takes no time. Let's say a principal is concerned about writing. He feels that the teachers don't pay enough attention to writing. He does nothing but send a memo to certain grade levels saying 'I'm interested in how the children are progressing in writing. Would it be possible for you, sometime during the next week, to have each pupil write a paragraph or send me a copy of some pupils' written work? I'd just like to see it.'

"He hasn't done anything except ask for the information, but you can't tell me that it won't have an effect upon the writing program when the teachers know that the principal is concerned about the quality of the students' writing."

Lee Newcomer

L. B. Newcomer

Q When you come into a principal's office what might you be looking for?

NEWCOMER: I would look for such things as the state of his desk, the state of his files, of the school itself. You can't very well ignore these things, particularly in terms of the management of the office. We feel that the atmosphere that is presented in a school office, particularly to parents that come in, is one of the most important criteria that parents use to judge the adequacy of the school. I think this is one very important part of the evaluation.

Q. Do you try to go through the school on this day?

NEWCOMER: On my first supervisory visit in the year, I try to put my head in each classroom. If there are situations about which a principal has some great concern, I'm glad to spend a considerable amount of time—but I want to put my head in each classroom. I am not evaluating the teachers when I do this—I am evaluating the principal.

Q. How are you evaluating the principal by doing this? Do you look to see if the teacher gets tense and scared when the principal walks in?

NEWCOMER: I doubt if I could ascertain that particularly well but, if everybody got pale and white and started stuttering, it might be something you would want to probe further. However, I think you can tell a great deal from the materials and resources available for instruction and from the general reaction of the pupils. You go with the principal to some classrooms and he automatically becomes a part of the learning situation. In another school, the teachers tense up. But primarily, we provide many instructional resources that are available to people who really look for them. How they are used is a real indication of the depth of the educational program.

Q. Suppose there are points that the principal is particularly interested in discussing with you. Would

continued on page 131



WORKSHOP FOR SCHOOL MANAGERS

How to double or triple your reading speed

PART 1 OF A 3 PART SERIES

Break comfortable old habits of reading and you'll save reading time. A three part series of lessons has been prepared to show you how to do it. This first article tells how to use phrasing and eye focus to improve your reading.

EDITOR'S NOTE:

Management of the public schools has become a complex business. No longer can a strong superintendent or school board president keep his office under his hat and his district under his thumb.

School managers, like business managers, are discovering that a new profession is growing up in post-war America—the profession of management.

With this article, the editors of School Management *embark on a new service—a service designed to bring to our readers the best and newest ideas in the management of time, of people and of oneself. Much of the material to be presented in this* **"Workshop for School Managers"** *is based upon work done by leaders of business and industry. Some of it* (see "How to supervise your principals," page 68) *will be based on good management practices developed in the schools.*

The first three articles in School Management's **"Workshop for School Managers"** *are designed to help schoolmen lick one of their most distressing—and time consuming—problems: getting through the mass of literature that is constantly coming to their desks.*

The articles, prepared by Reading Development Laboratories, are based on techniques being used in many of our schools. Certainly schoolmen can take a leaf from their own courses and improve themselves in this vital area.

■ ■ ■ There's no talent needed to read faster. Anyone can do it. The trouble is, most people have been poorly trained. They read poorly throughout their lives, wasting thousands and thousands of hours. They plug along like beginners simply because they have never learned how to improve.

For example, the average schoolman reads about 250 to 350 words a minute. This is far short of a person's potential. The average administrator can easily improve his reading speed 100%, 150% or more. When these figures are converted into the time saved for the more creative aspects of your work, the value of the gain is evident.

There are several things you can do to get the most information in the shortest possible time from your reading. This series of articles will show you the techniques used by skilled readers and how to apply them yourself. A few minutes of

Ten minutes of practice for a few days will soon have you reading

daily practice will help you develop new reading habits that not only benefit your work, but bring a new perspective in your attitude toward all reading.

What's your speed?

To find out how your reading speed compares with that of the average reader, turn to the article starting on page 108. Read the article and use a clock or watch with a second hand to determine the reading time. Divide the total number of minutes into 2,250 to discover your word-per-minute reading rate.

Do not be surprised if your reading rate is well below 250 words per minute. Every person varies but even the slowest reader is capable of the same increases as the person who reads at an above average rate now.

The last article in this series will offer another reading exercise, to check your success with the new reading techniques. Make a note now of your present reading speed and then compare this with your reading speed when you have completed the "lessons."

How do you read?

When you first learned to read, you were probably taught in the following manner: Your class was divided into three or four reading groups, and once or twice a day you and your small colleagues sat in a circle in front of the room and took turns reading a selection aloud to the teacher. Therefore, you first learned to read words by seeing them, saying them and then hearing them.

Unfortunately, this training was not carried any further and most people today still have to say and hear the words. As a result of this early training, there are three types of readers:

- The motor reader who forms the words with his lips as he reads.
- The auditory reader who hears in his "mind's ear" the words as he reads.
- The sight reader who immediately gathers information from the printed page without aid of the auditory or vocal senses.

The last of these, of course, is the skilled reader. Unhampered by having to say or hear the words, he is capable of reading several words at one time. This brings us to the most important technique used by skilled readers—phrase reading. If you learn this technique alone, it will save countless hours of wasted reading energy.

When you read a line of print, you may think your eyes sweep smoothly across the page. But your eyes do not pick up words while in motion like, for example, a movie camera. Rather, they have to get a series of "stills," starting and stopping across the line. The eye pattern of the average reader might look like this:

1 2 3 4
Contrary to common belief
5 6 7
comprehension increases with
8
speed.

The skilled reader, however, makes only a few of these stops, and he makes them smoothly, as indicated by the numbers in the following lines:

1
Reading word by word
2 3
is a condition that can cause
4 5
a slow reading rate even though
6 7
comprehension ability is good.

It is not at all difficult to learn to read phrases instead of individual words. But in order to acquire the phrase reading habit, you must develop an awareness of phrases as thought units.

The phrase circling method is the first step toward this awareness. Take a heavy pencil and draw a circle around each phrase in the next article you read. These need not be grammatical phrases, but simply groups of words containing meaning in themselves as a unit, answering, for example, "who," "what," "why," "when," "where," etc.

After you have circled a few phrases, mark a small dot or "x" slightly above, and in the center of each phrase. You should be able to see the whole phrase when you focus on this point. For example, focus your eye on these "x's."

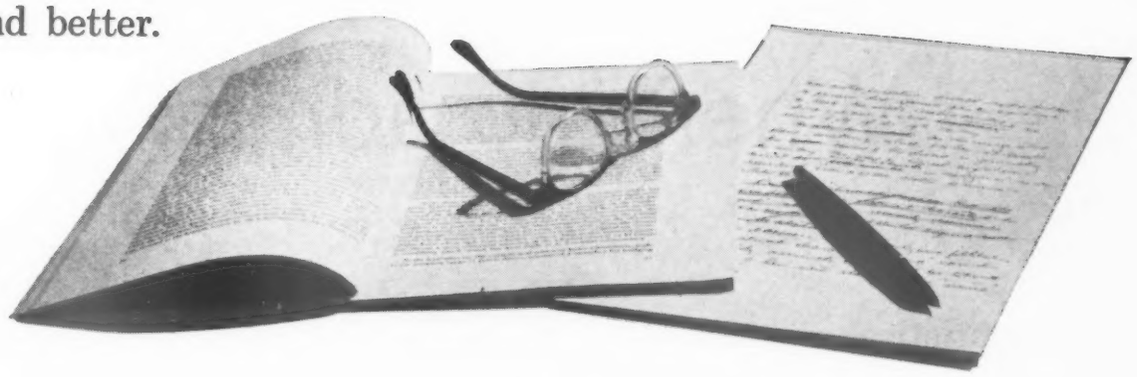
x x
If you read word by word
x x
you spend needless time at it.

Ten minutes of practice for a few days will soon have you automatically seeing phrase groups instead of individualized words.

Comprehension will increase because, if you read slowly, your mind is free to wander. By reading faster, in phrase or thought units, your mind is absorbed, and you are

A 64-page do-it-yourself book, which tells you the how, what and why of reading improvement with self gauge to determine your reading rate, is available for $2 from Developmental Research Institute (an affiliate of The Reading Laboratory, Inc.), Order Dept., 500 Fifth Ave., New York 36, N.Y.

faster—and better.



reading the way you think—in concepts.

Columnar reading

You can also improve phrase consciousness by letting your eyes move down a column of type with only one fixation per line. At first it will help you to draw a pencil line down the center of the column and to follow this with your eyes. Try to see the first and last words of each line of type while looking directly down the center. Sample:

SCHOOL MANAGEMENT is a magazine that offers practical solutions to school management problems. It identifies specific problems, suggests solutions and gives case histories showing how the solution has worked in one or more districts, and the results achieved. Top administrators throughout the country have rated SCHOOL MANAGEMENT the most useful of all school administration publications. Many call it the "how to" magazine for school boards, superintendents and other top level managers.

To start, you may find it easier to try the second and the next-to-last words of each line of type. Later you may practice this technique on the way to work or when it is necessary to read columns of news or magazine print. Though this and many of the other techniques may sound like a waste of time, they help greatly to increase your eye span.

The following exercise will tell you whether or not you are an auditory reader (one who depends on saying and hearing each word).

Repeat aloud, over and over, until it becomes almost automatic, this chant: **"one, two, three, four, one, two, three, four."** Then begin to read while still chanting aloud. If you depend on hearing and saying the words you read, then the print will seem quite meaningless.

In order to become a visual reader, keep up this "mumbling" practice. You will soon find that you are able to direct your mind to what your eyes are reading, while your auditory and vocal organs are busy with the chant. When this happens, you are on your way to real reading efficiency.

Phrase reading helps your concentration and comprehension as well as your reading rate. The plodding, word by word reader thinks more rapidly than he reads. His mind races ahead, becomes distracted. The phrase reader gets the material in bigger "visual bites," and has more to occupy his attention. Because his concentration is better, he is much less likely to become distracted.

Furthermore, we naturally think in concepts or thought units. By reading phrases, you read thought units. You do not have to stop after a few words to assimilate an idea, as does the word-by-word reader, because you are already reading in ideas or concepts. This ability is basic for more effective reading.

Indenting as a technique

The eye is automatically pulled to the margin or white space on either side of the printed page. If you are reading properly, by phrases, then it is unnecessary to begin at the very beginning of a line or go to the very end of it. There is nothing in the margin to read and if you are reading by phrases then it is wasted motion. Start every line about one-eighth of an inch short of the end margin, then swing down to the next line one-eighth of an inch in, etc. At first, to acquire this habit, sketch a light line down each side of the page you are reading as has been done on this paragraph. These guide lines will help you to start and finish within the limits suggested. You will notice that there is almost a physical pull of the eye to go all the way to the margins. Like the other techniques you will learn in this series, it takes practice to overcome firmly established habits. However, all the parts help to make the whole—in this case, the skilled reader.

A good reading environment

Eye fatigue and visual strain account for a large part of distraction. It is taken for granted that you are aware of the value of good lighting. Choose a location for reading and research where interruptions will be at a minimum. Don't be too comfortable. Try for a compromise between relaxation and tension. A little tenseness helps you to stay alert.

Finally, as much as your schedule allows, try to make your reading time and place habitual. You will begin to associate the time and location with concentrated reading efforts. Habit will become a help. Comprehension will increase with speed. **End**

Where do administrators

Here's a statistical picture of U. S. superintendents and business managers—based on a new research study conducted by SCHOOL MANAGEMENT.

■ ■ ■ Early this year, SCHOOL MANAGEMENT conducted two studies among superintendents and school business managers. We were interested, primarily, in two pieces of information:

1. How long have the typical U.S. superintendent and business manager been in their jobs?

2. What had the typical superintendent and business manager been doing prior to becoming administrators?

Conducting the study

A questionnaire was sent to 2,200 superintendents and 900 school business managers. Names were selected using a statistically accurate sample of school districts by geographical location and by district pupil enrollment. In fact, the sample used for the superintendents was basically the same as the one prepared for SCHOOL MANAGEMENT's Cost of Education Index.

At the time of "cutoff," 1641 superintendents had responded (75%). Four hundred and fifty-eight usable returns (50%) were received from business managers.

Superintendents

The returns from superintendents were separated into two groups: those who had been appointed to their present jobs in the last four years and those who had held their present jobs prior to January 1, 1957. The survey showed that 33% (536) of the superintendents had not been in their present jobs four years ago. In fact, 18.5% (303) had *never* held a superintendency until sometime in the last four years. The *median* superintendent, of the 1,641 surveyed, had been a superintendent for only six years.

Where did these *new* superintendents come from? Seventy percent (217) were promoted to the top job from within their own district. Thirty percent (86) were taken from another district where they held jobs lower than the superintendency.

There is another way to approach these figures. Where did school districts find the men they appointed to the superintendency in the last four years? Of the 536 districts which have found a new superintendent since January, 1957, 41% (217) promoted a man from within their school district. Fifty-nine percent (319) hired their candidate away from someone else. It's interesting to observe that, of this latter group of 319 who were "hired away," 71% (228) had held the superintendency in the district from which they came, while 29% (86) were drawn from a lower echelon in another school system.

Superintendent's background

There is a popular belief that a large number of school administrators had been physical education

WHY SUPERINTENDENTS GET FIRED

A recent survey conducted by Richard Barnes Kennan of the National Commission for the Defense of Democracy Through Education (NEA) pinpoints the perils of the chief administrator's job. During 1959-1960, of the 8,170 appointed superintendents in the U.S., 12% left their jobs. One hundred and sixty-nine superintendents were not re-employed by their districts. All in all, while there is no accurate measurement of just how many of the 810 were fired, it is apparent that a substantial number resigned before the axe fell.

Thirty superintendents refused to resign under pressure and chose to stand their ground with their school boards. Seventeen of these were finally evicted from office. An additional 66 are known to have quietly resigned rather than arouse a furor over the issue.

Why were they fired? Kennan states that three reasons were given, in this order: poor public relations, conflicts with board members, and finance and budgetary problems.

come from?

specialists in their teaching days. This isn't borne out by the survey. Of the 536 respondents who were appointed to the superintendency since January, 1957, 17% had been part-time or full-time physical education instructors. Of the 1,105 men who have held the superintendency for more than four years, only 14% had included any physical education instruction in their teaching experience. In both groups, more than 90% had taught academic subjects at either the secondary or elementary level prior to becoming administrators. Among superintendents appointed in the last four years, the average number of years spent as a teacher was seven. The longer-term superintendents averaged nine years of classroom experience.

Almost 60% of those appointed to the superintendency, from within their own district (in the last four years), had been principals *just prior* to their elevation. Of these, slightly more than 40% identified themselves with the secondary schools; 20% with elementary buildings. The others did not specify the type of school they led.

The next most popular position from which to draw a superintendent is assistant, deputy or associate superintendent. Twenty-seven percent of those promoted from within their own district had held one of these posts just prior to their elevation. Seven percent of the new superintendents had been teachers and 4% assistant principals. Business managers, guidance directors and elementary and secondary supervisors completed the list.

When a district looked outside its boundaries for a new superintendent—and did not hire a man then holding the job of superintendent—in almost half the cases it still chose a principal to take over the job. Again, assistant superintendents were the second best stepping stone, accounting for 16% of the new superintendents hired from outside. Teachers stepped up in 9% of the cases and university faculties provided the men 7% of the time. The rest of the candidates were scattered among business managers, supervisors, graduate students and former members of the armed services.

Business managers

This is a relatively new title in American education. SCHOOL MANAGEMENT's annual survey of school districts reveals the startling growth of this title since 1958. For example:

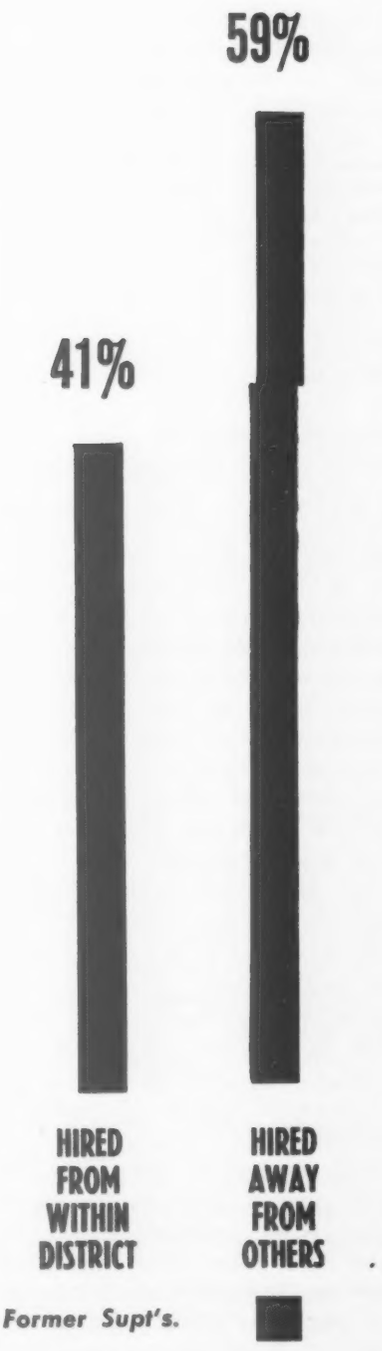
In 1958 there were 2,769 business managers.

In 1959 there were 3,136 business managers.

In 1960 there were 4,580 business managers.

Today, our figures indicate there are over 5,000 school officials with the business manager function.

To gather this information, SCHOOL MANAGEMENT contacts every single school district in the



In the last four years, 41% of the districts hired new superintendents from within their own systems, while 59% went outside. Of those who went outside, 71% hired away some other district's superintendent, 29% found new men for the job.

United States with over 300 pupils enrolled. The question asked, each year, is designed to elicit the presence of a *bona fide* business manager, not just a man carrying a business title.

As one might expect, larger school districts are more apt to have such a person. This was the breakdown, by district size, at the end of 1960:

No. of students	No. of Districts	No. of Business Managers
Over 25,000	123	119
12,000 to 25,000	230	200
6,000 to 12,000	629	374
3,000 to 6,000	1,409	746
1,200 to 3,000	3,147	1,146
600 to 1,200	3,170	858
300 to 600	3,635	660

Why the increase?

Two powerful forces are at work to produce this trend. First, many states have mandated the position. Second, as school districts grow in size as a result of increased centralizations and consolidations, the need for a business official increases. Strong evidence to support this need can be found in a study conducted by SCHOOL MANAGEMENT in 1959.

A representative sample of superintendents and school board members was asked two questions:

1. Approximately how many hours per month do you spend on your job as a school official?

2. Approximately what percent of this time is spent on strictly "non-educational" or on business duties (like supervising construction, approving bills, purchasing, building maintenance, insurance, transportation, etc.)?

The answers to these questions were divided into two groups—those from superintendents and those from school board members. Then these returns were split by district size. Finally, the answers were tabulated by whether or not the respondent's district had a business manager.

The startling results are shown in the chart at the right.

Operating without a business manager, almost half the superintendents spent more than 50% of their time on non-educational affairs. With a business manager, superintendents found they could spend almost two-thirds of their time doing the job they were hired to perform. The survey showed that the addition of a business manager had the same proportional effect on the time spent by members of the board though they still spent most time on non-educational duties.

The 458 *bona fide* business managers surveyed early this year were asked to tell how many years they had held the job of business manager.

The median respondent has been in his job for only five years. One hundred and one (22%) became business managers in the last 18 months. One hundred and fifty-four (36.6%) became business managers in the last 36 months.

So far as background is concerned, 303 (66%) had been teachers while 155 (34%) came to education from business pursuits.

Of the men who had been teachers, 204 (67.3%) had taught academic subjects, 48 (15.8%) had taught vocational courses, 42 (13.9%) had taught physical education, and 90 (29.7%) had taught commercial courses.

Although it had been established that the 458 respondents were *bona fide* business managers, as opposed to lower echelon business officials, the number of different titles of these men is extremely broad.

For example:

165 (36%) *are called business manager.*

105 (22.9%) *are called assistant or deputy superintendent.*

39 (8.5%) *are called administrative assistant.*

66 (14.4%) *are called secretary to the board of education or clerk of the board of education.*

Most interesting, perhaps, is the increasing trend toward placing an educator in the job of business official. While 66% of *all* respondents had been teachers at some time in their careers, 71% of the individuals appointed to a business manager's post in the last three years had been teachers. This trend toward putting the professional educator in the business slot will continue. **End**

HOW SCHOOL MANAGERS SPEND THEIR TIME

Superintendents	Total hours per month spent on the job	Percent of time spent on non-educational duties	
		with bus. mgr.	without bus. mgr.
Under 1,200 pupils	215	34%	49%
1,200-6,000 pupils	205	33%	53%
Over 6,000 pupils	222	35%	43%
School board members			
Under 1,200 pupils	16½	53%	61%
1,200-6,000 pupils	20	52%	58%
Over 6,000 pupils	25	51%	60%

How not to present a new contract to teachers

Feuds burst out into the open in Santa Fe, N. M., when teachers were suddenly presented with a new 'merit-demerit' plan. This study in turmoil shows what you can do to avoid similar pitfalls.

■ ■ ■ A little over a year ago, the Santa Fe, N. M., school board gave its teachers a new kind of contract. In effect, it was a form of "merit pay." The board was well-motivated, but there were two major faults which caused an explosion:

1. The teachers—or their association—had not participated in drafting the new plan.

2. The board was empowered to *reduce* salaries as well as increase them, and the teachers had no recourse.

Ice for icy situation

The "merit-demerit" clause was the breaking point, but a history of poor human relations preceded this crisis. For example:

The superintendent, new to his job, said one thing to the board, another to the teachers.

Teacher pay was frozen for the first time in 12 years, but the superintendent got a raise. He also brought in a new personnel director.

Teacher tenure was considered in jeopardy, even though the board was trying hard to get better teachers and a better program. A popular high school teacher, an outspoken critic of the board, was transferred to a "little Siberia" school, later was ordered dismissed.

Extra pay was offered for extra work, but the teachers were suspicious of favoritism.

Poor communications prevailed. There was no give-and-take between faculty and administration.

Pertinent questions and answers

What went wrong in Santa Fe? Just about everything. Why? Because common sense was forgotten. Who was to blame? Everyone—the teachers, the board, and the administration.

To begin with, Santa Fe is a mixture of three cultures—Indian, Spanish-American and Anglo-American. It's also the state capi-

tal. Unfortunately, state house "politicing" is a major business, even in schools and school administration.

Its blend of ethnic groups had a divisive influence, contributing to misunderstanding, suspicion and unnecessary competition. Board members were elected because of political, religious or group affiliations, not because they represented the community as a whole.

State laws also added to the problem as far as the contract muddle was concerned. Under New Mexico law, school boards can't announce salaries until shortly before the school term starts. This, in effect, hamstrings boards when they are trying to hire or rehire teachers.

Hot spot for superintendent

At the time the cauldron bubbled over, the superintendent had just completed his first year in office. He had been an educator for 33 years and was working on his doctorate. His predecessor had resigned in the middle of a school term.

The new superintendent faced many pressures—the district was in financial straits, there was a salary problem, and the board wanted a better staff and program.

Here was a golden opportunity for a fresh start, a new outlook. But what did the superintendent do? According to an NEA investigating commission, he admits talking out of both sides of his mouth—one way to his staff, another to his board.

And he certainly didn't help matters any when, shortly after his appointment, he told the teachers they wouldn't get any raises but that his salary had been increased $2,000. At the same time, a salaried personnel director was appointed. All this when, for the first time in 12 years, teachers were denied a salary boost although teacher pay was increasing throughout the nation.

The superintendent also put into effect the new "merit-demerit" pay system which the board had approved—without apparent advance notice or discussion with teachers.

Little riders, big squabble

Teachers first heard about the revised contracts in August of 1959. Word came not from the superintendent or board but through their newspapers. They received their contracts after school opened in September. The pacts were similar to those of the previous year, except that there were two riders attached.

The first set up specific salaries and increments. The second listed employment conditions and tenure, and further gave the board the right by contract, rather than policy, to reduce or increase the salaries of any or all teachers. In effect, this made tenure meaningless.

The teachers protested and presented a counter proposal to eliminate the second clause from the contract. The board rejected that bid but revised the rider slightly, on the advice of the superintendent. Still, in effect, it adopted a contract without really knowing what its final wording would be.

On the first day of autumn, the situation was brought to the attention of the National Education Association's Defense Commission. A special committee met in Santa Fe, for three days in April of 1960, and made an exhaustive survey of the entire problem, taking all sides into account. More than 300 persons were questioned.

The shield of silence

The committee found a "community-tolerated philosophy" of political manipulation, scapegoating, rumor circulation, and fear. Distrust and hostility had replaced confidence and cohesion.

Many citizens were afraid to speak out against the status quo, lest their businesses or children suffer. Newspapers were accused of bias and one-sidedness. Controversies made headlines. Progress went almost unnoticed. Some people would not speak out at public hearings but would buttonhole committeemen

HOW TO PICK A FIGHT

Board: Keep your meetings secret. Don't tell teachers what you're doing. Keep your superintendent under your thumb, hard. Get into politics. Keep faith with nobody. Be as overbearing as you can. Snub the people; they don't count. Down with progress.

Superintendent: Be a martinet. Don't give the teachers an even break. Side with the board all the time—that's your bread and butter. Tell the board one thing; the teachers another; the public an even different version. Don't be specific. Talk in generalities. Be inconsistent. Play politics. Find stooges. Threaten, cajole, as long as you win.

Teachers: Don't pay attention to the board or superintendent. Do what you want, regardless of the consequences. Nobody's right but you. Keep aloof from your superiors. Shun your community. Don't work so hard; it's just a job.

afterwards and hold animated conversations.

Teacher morale was almost nonexistent. No matter what the school administration did, suspicion arose immediately. Administrators reported that a few leading teachers were "troublemakers." Teachers told how they couldn't even trust each other.

The classroom teachers' association charged that the superintendent was trying to destroy it through personality conflicts and creation of a new group—the Santa Fe Education Association—following merger of city and county schools.

Accusation followed accusation—charges of political influence, graft, mismanagement and unprofessional conduct were frequently aired.

Teacher troubles intensified

The teachers were like a firecracker that pops off in every direction, without a clearcut goal or well-defined outlook. Their representatives never showed up at board meetings. Individual teachers even hired attorneys if they had specific grievances. They complained that the board and superintendent wouldn't hear them out. Rightly or wrongly they feared retaliation no matter what they did.

Their two top officers showed up at a state education association meeting, accompanied by the superintendent, and asked for a postponement of the NEA probe to give the school board a chance to cooperate and work out the problems. Then these leaders wrote the NEA that they didn't have time to consult with the other teachers before the state parley, and so couldn't really speak for all of them! But other teachers and parents persuaded the NEA not to delay its investigation.

Personality clashes were typified by the case of the popular teacher, an outspoken critic of the administration, who was transferred from high school social studies to a grade school. Protests followed. So she was sent instead to a junior high school with discipline problems, known as "little Siberia." Still later, she was ordered dismissed, a notice that was appealed to the courts.

It became apparent that although the teachers' association was united on some issues, it was not on all, and its leadership was indecisive.

State gets into the act

Shortly after the board's contract action, teachers were notified to sign their pacts. The teachers' association asked for an extension, but by the time the personnel director sent out a memorandum agreeing to the delay, the date for signing had passed and all but 24 of the 278 teachers had signed up.

It was then that the teachers sought an opinion from the state's attorney general. On November 3, he ruled that the "merit-demerit" rider was illegal unless approved by the state school board.

The state board refused to act on the endorsements at all. Instead, it authorized an optional provision for "reasonable" rules. This became statewide policy. Santa Fe's board accepted, and the last of the teacher contracts finally were signed by February 1, five months after they first were issued. The NEA calls this delay "indefensible."

While the contracts were the major dispute, another issue rankled. This centered on extra pay for extra work. The superintendent set up committees for cataloging, scanning literature, and even "developing units of study for children in connection with bond needs." Those who served on the committees received $100 or more.

Some teachers saw these special groups as a device to induce their support, or even curry favoritism. The superintendent said his groups had board approval. Board members, however, claimed they were unaware of the committees or of teacher complaints about them.

How could order be restored from near chaos? Suggested the NEA committee: *by one and all working together.* The alternative: "All of

continued on page 128

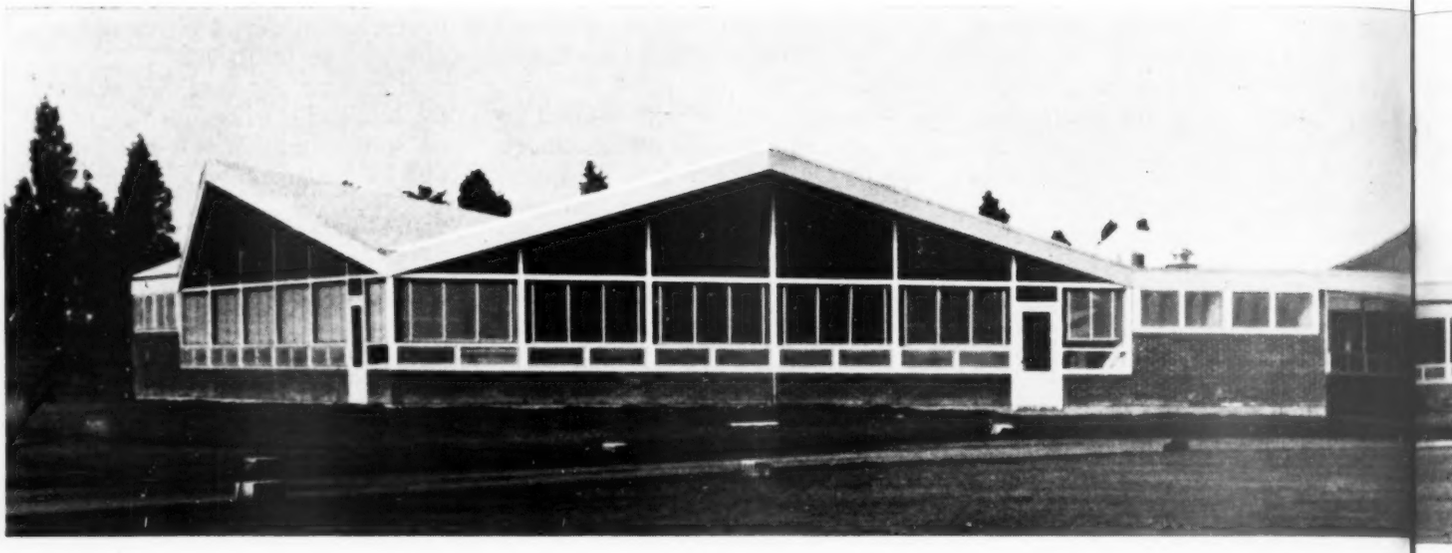
HOW TO MAKE PEACE

Board: Be fair with everyone. Let your superintendent know he's a leader, not a follower. Give the teachers an even break. Stay out of politics. Be nonpartisan, humble. Ask the public for help. Keep your meetings open to everyone. Act, don't pass the buck.

Superintendent: Work with the teachers and board, not against them. Be fair but firm, frank but tactful. Don't get your stories mixed. What you tell one you tell all. Avoid politics. Keep faith with your board, your staff, and the public. Intermingle. And smile.

Teachers: Ask, don't demand. Listen to your board and superintendent. Don't look under the rug for old grudges. Know your superiors better. Participate in community and school organizations. Work harder to earn more, learn more. It's not just a job; it's a way of life.

Getting away from the



Conventional square and rectangular classrooms are not necessarily ideal, says one architect. His point is being made by an elementary school in Tinicum, Pa. Its seven classrooms are triangular.

Editor's note: *Last year,* School Management *presented excerpts from "Planning for schools with television," a report compiled by Dave Chapman, Inc. for Educational Facilities Laboratories.* (See "Getting away from the rectangular classroom," SM, July '60, page 60.)

Chapman's book challenges the concept of rectangular classrooms and suggests that schools might find solutions to many of their housing problems by breaking out of the traditional "eggcrate" mold. In the following article, SM takes you to a school that broke the mold three years ago, to find out how its new shapes are working out.

■ ■ ■"Many a schoolman," says Architect Jules Gregory, "has concluded that a square or rectangular classroom is very nearly ideal.

"This is an absurd oversimplification. What's wrong, for instance, with a triangular classroom?"

Nothing, if you would take the opinions of school officials in upper Bucks County, Pa. They have a few reservations, but point with pride to Tinicum Elementary School—a building with seven triangular classrooms.

This school, located in a rural community 40 miles north of Philadelphia, departs from the conventional—even by today's standards. There's not a single rectangular enclosure in the entire structure. The multi-purpose room (cafeteria-auditorium) is triangular; offices and storerooms are parallelograms and trapezoids. Total cost: About $235,000. Savings in construction, as matched with plans for a conventional school: About $15,000. Costs of maintenance and upkeep: Normal.

"The plans for the new school created quite a controversy," says Architect Gregory. "But once the school board was convinced, it sold the com-

rectangular classroom—II



munity on the idea that classrooms need not be squares or rectangles."

"In fact," says Supervising Principal Melvin G. Mack, "working with triangular classrooms has been an enlightening experience. We're so pleased with the advantages they offer that we're planning seven more for this school."

Tinicum Elementary School is nearly three years old. Its unique feature is that each classroom is an equilateral triangle. The walls are 42 feet in length and the corners are 60-degree angles. In each room there is one exterior wall with a gabled ceiling and roof. *(See photo on page 86 for illustration of this.)* This wall and peaked gable unit is almost wholly glass.

The multi-purpose room is similar, differing in that it has no glass wall and is slightly larger. There's a small stage at the apex of the triangle, and the food service and storage units are located at the base.

How has the school worked out in actual use? What problems have been presented because of its unconventional nature? To get the answers to these questions, a SCHOOL MANAGEMENT editor interviewed the architect and the supervising principal. Here are excerpts from that tape-recorded meeting.

Q. Three years ago, Mr. Mack, the Tinicum school board accepted this unconventional building. In view of your experience with the school, do you feel that you might have erred in agreeing to go along with the experiment?

MACK: Certainly not. There are certain reservations, but by and large we are pleased with the design and we're taking full advantage of the triangular classrooms.

Q. Specifically, what advantages have you realized? What makes a triangular classroom superior to a square or rectangular one?

GREGORY: Let's start with the lighting. Because one-third of the wall space is glass—the exterior wall—we get a terrific amount of natural lighting in the room. When light enters, it is diffused and reflected evenly due to the relative position of the other walls.

Q. Why not have a conventional classroom with artificial lighting?

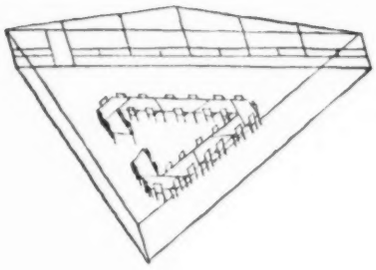
GREGORY: Secondary lighting in a conventional classroom is an ex-

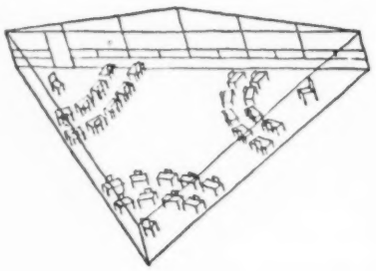


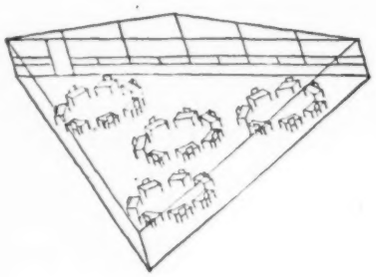
MACK

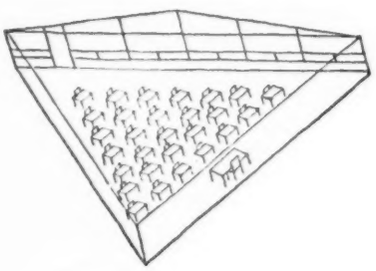


GREGORY









pense. There's no question that artificial lighting is desirable, but in this school we get even, mellow lighting from the prime source without the necessity of overhead fixtures. We have them, of course, but they are not used much and we're saving money.

Q. Don't you have a problem with so much glass? What about breakage, and the glare of sunlight?

MACK: We've had to replace some glass, but there's been no vandalism or intentional breakage. As for the glare, in rooms which are subjected to a lot of direct sunlight, we have coated the glass with a glare-reducing plastic. We also control this light with venetian blinds.

Let me remind you that this is a rural school for elementary children. We wanted our children to be able to look outside and appreciate the out-of-doors.

Q. How are the acoustics? Are they as good as you would find in a conventional classroom?

GREGORY: Better. The principal reason is because there are no parallel surfaces in the classrooms. Even the ceiling is not parallel to the floor—there's a ceiling beam rising up and out from the inner apex of the triangle. Thus, as with lighting, there's a comfortable diffusion of sound within the room. I think this is one of the major advantages of these classrooms.

MACK: Acoustical control in the multi-purpose room has really surprised us. Even with 100 children in there at lunchtime, the room is fairly quiet. And during a performance, no matter where you're sitting, it sounds as if you're in the front row.

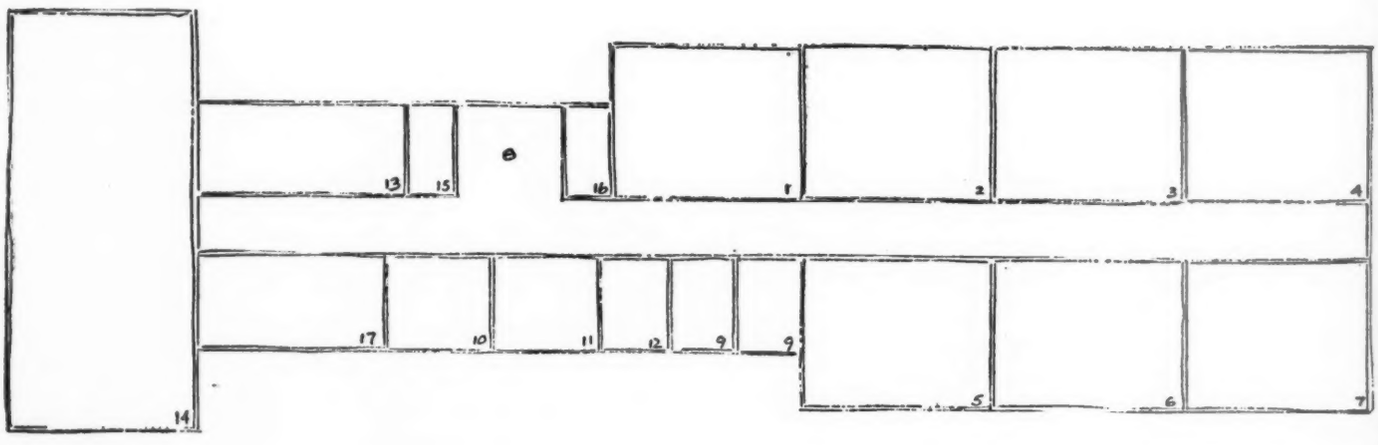
Q. Lighting and acoustics are advantages of a physical nature. How have triangular classrooms improved instruction?

MACK: The chalkboard wall in each room is actually one-third of the usable wall space, compared with only one-quarter or less in a conventional room.

Q. Why is that significant?

MACK: This wall is 42 feet long. Its length permits every child to get a clear, unobstructed view. When children are working from the chalkboards, the teacher arranges

CONVENTIONAL CLASSROOMS COMPARED



Compared with conventional building, school with triangular classrooms containing same spaces for same purposes reduces necessary floor space by an area equivalent to one classroom. Architect made extensive use of corridor to effect savings. Key to drawings: **1-7,** classrooms; **8,** corridor and lobby; **9,** toilets; **10,** library; **11,** maintenance materials storage; **12,** heater room; **13,** kitchen; **14,** multi-purpose room; **15,** music room; **16,** curriculum materials storage; **17,** teachers, nurse and principal.

seating so that it is staggered—seven in the first row, six in the second, etc., with the tallest children in the rear. We get more children closer to the chalkboard than we could in a conventional room.

These triangular rooms are flexible and lend themselves to many seating arrangements. One is a circular pattern which teachers like for large group activities. This couldn't be done as well in a rectangular room. Another, which teachers like for small groups, is an arrangement of about six or eight children seated in an arc with its axis in the corner. (*See diagrams opposite page.*)

Q. Could this be done in a rectangular or square classroom?

GREGORY: Yes, but there the corners would be 90 degrees. A 60-degree corner promotes a feeling of intimacy in a small group and isolates it from other activity in the room.

MACK: Originally, we thought that a three-corner room might result in some excess space which we could not use effectively, but experience has proven the reverse to be true. Some corners have doors, others are used for small-group instruction, or for file cabinets, storage of materials, and educational displays.



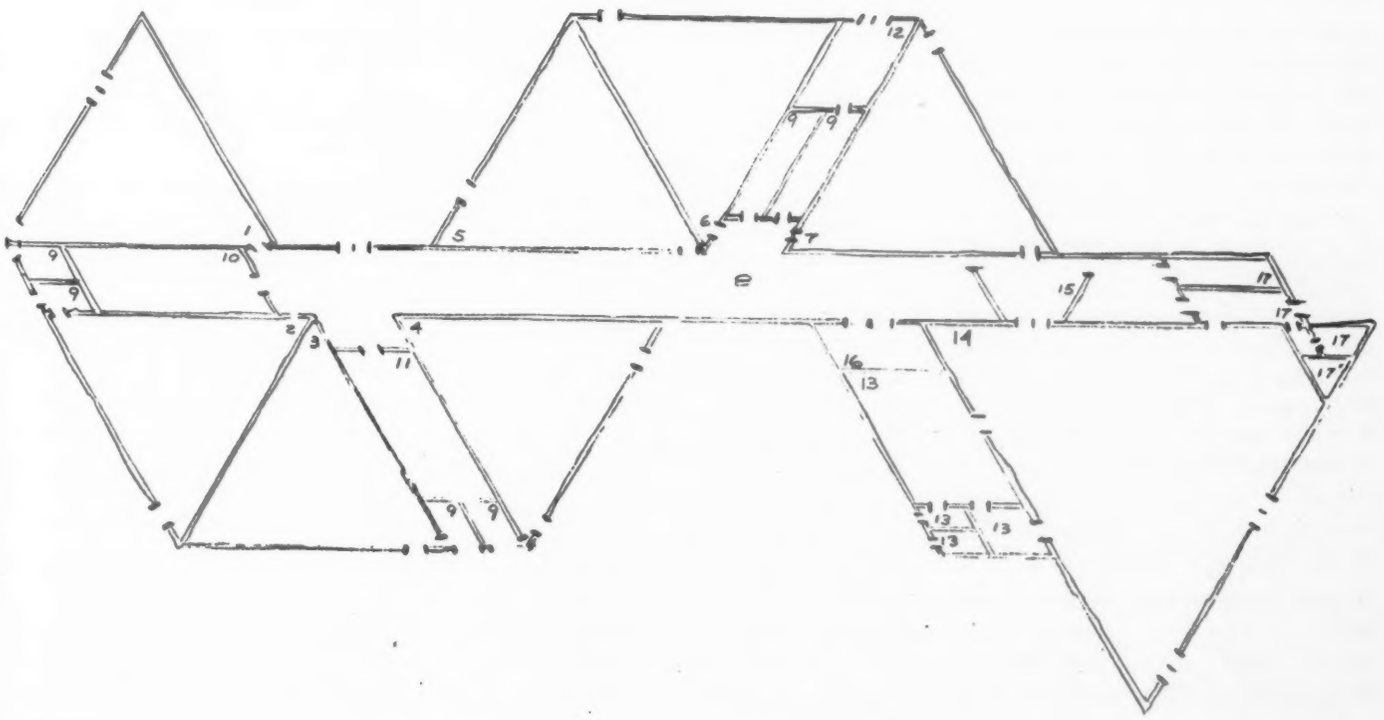
Long teaching wall (42 feet) permits staggered seating of students close to chalkboard for good viewing. Chalkboard covers one-third of usable wall space in room.

Q. How have your teachers reacted to triangular classrooms? Have there been any objections?

MACK: In the beginning, I think they were flattered by all the attention that this school received. In actual use, I've yet to hear a dissenting opinion. They tell me that they like the flexibility in seating, the abundance of natural light on the teaching wall, the fact that the acoustics are superior. Several teachers have told me that the school achieves a spirited, non-institutional feeling. There's been no objection whatsoever to the triangular rooms.

GREGORY: As an architect, I'm gratified by the reactions of the

WITH TRIANGULAR





Large glass area provides an abundance of natural lighting and cuts electrical bills. Light in room is diffused evenly due to non-parallel surfaces.

teachers. It's difficult to express, but they use these rooms sensitively. The administration is enthusiastic, too. I must admit, though, that when I conduct visitors through the school, there are no lukewarm reactions. Most people love the school—a few despise it.

Q. And the pupils?

GREGORY: The children like this school; they help to keep it looking good and are properly cautious with the equipment and furniture. They don't mark walls, and they pick up their papers and crayons from the floors. I think this is a good index of how they feel.

MACK: I haven't heard a single youngster make a derogatory remark about the school.

Q. Has maintenance been a problem?

MACK: Well, we've had heating problems but I don't think they had any relationship to the design of the school. Routine maintenance is normal. The fact that the classrooms are triangular has not been a factor in maintenance.

GREGORY: You know, some people might think we built this school for a stunt, but no one in Tinicum felt we were wearing a funny hat. It was simply a matter of getting the best school—the most space—that this community could afford. The fact of the matter is, the school was built for about $15,000 less than estimates.

Q. Was this a difficult school to build?

GREGORY: No easier nor more difficult than a conventional school. There is a point in the design which carries an advantage, though. By making extensive use of one corridor, we were able to eliminate an amount of space equivalent to a classroom. The corridor runs the length of the school and has two short branches. (*See sketch page 85.*) We closed off, or partitioned, the branches and terminals of the corridor and set up a library, a music room, an administrative office, storage for maintenance and curriculum materials, toilets and a heater room. Only about half of the corridor is actually used as a corridor.

MACK: A sidelight: We get a lot of natural light in the corridor, so it costs us less to illuminate it than a conventional double-loaded corridor.

Q. Since your administrative and auxiliary spaces are actually in the corridor, aren't you a little cramped for space? Wouldn't you have profited by having conventional offices?

MACK: We're not cramped. This corridor is 10 feet, four inches wide. The economical use of space and the consequent reduction in costs of construction and maintenance was one of the elements which sold us on the school.

Our offices and storage areas may be small by comparison with conventional spaces, but we have all the room we need. And the fact that the rooms are not rectangles or squares, but are parallelograms and trapezoids, is of no consequence. We hardly seem to notice.

We're planning to add seven more classrooms. When we do, we'll knock out walls at the end of the corridor (*see sketch page 85*), make the addition, and relocate the office area.

Q. Will you be making any changes in the basic design?

MACK: No, not in the basic design. There are some minor changes I'd like, such as having all exterior glass tinted to reduce glare. The plastic coating which we now have has a tendency to crack and peel.

As for the triangular classrooms, we're happy with them and the advantages they offer. One of my school board members summed it up nicely for the skeptics when she said, "I don't think anyone's education has ever been impeded by the shape of a classroom. The education a person receives comes from a teacher, not a triangle." **End**

TRENDS 2

& Industrial arts home economics

■ ■ ■ What is the trend in home economics—in industrial arts?

The only honest approach is to say that both subjects are still taught, in most schools, in exactly the same way they were taught at the beginning of this century. Most of the change that one hears about is either superficial or just plain "talk" with very little action.

This does not mean that specialists in these subjects are lost for ideas or that all school districts are to be criticized equally. (The article on the following pages shows, for example, how far some forward looking educators have gone.)

What must be stated, however, is that the bulk of the teachers in these subjects—and the bulk of the school systems—have permitted stagnation.

What is a good program in industrial arts?

The men at the cutting-edge of this field seem to have two main objectives:

1. To bring the curriculum into focus with a modern industrial and technological society, not just today's, but tomorrow's, too.

2. To unify industrial arts with the rest of the school's program.

These objectives can be achieved in many ways. One interesting example is the correlation of industrial arts with science. Recent conferences of specialists have produced whole new efforts to go beyond mere emphasis on design and workmanship. Their idea seems to be to correlate scientific principles with construction, and to seek an educational application of the finished product. Thus, the students might build meteorological instruments in which construction and application are tested as a *unit of study*. Strong evidence of this trend will be found in some of the school-centered science fairs.

What is a good program in home economics?

A new concept has been taking shape for years, but the average home economics program still commands very little attention in most school systems. The trend seems to be to de-emphasize "cooking and sewing" in favor of training for the broader responsibilities of managing a family group. This does not

Provisions for industrial arts & home economics in new school structures

	No. of structures	With home ec.	With ind. arts
Junior High Schools	172	106	115
Junior High Additions	127	31	42
Jr.-Sr. High Schools	134	113	111
Jr.-Sr. High Additions	149	47	69
Senior High Schools	296	245	240
Senior High Additions	298	64	117

mean that sewing and cooking are to be ignored—any more than mastery of hand tools is to be ignored in industrial arts. But it does mean that these skills are adjusted to the role of a woman in the modern family. As one home economics teacher told us, "It isn't unreasonable to consider driver education as a logical facet of home economics. In a suburban situation like ours, it's fundamental." The same teacher, as did others, emphasized the need to educate girls to the multitude of new fabrics now on the market, and to recent and reliable revisions in the field of nutrition.

What about facilities?

If one clearly separates vocational training from industrial arts, little change in facilities is indicated by the new thinking. A recitation area within the industrial arts department is required, if the "shop" itself is unsuitable.

The same is true of home economics, although there does appear to be need for greater flexibility of space than heretofore.

At the present time, in most schools, even the new ones, there is little evidence that basic equipment is much changed.

Junior high school is the stage at which students are first introduced to industrial arts and home economics. It is somewhat surprising, therefore, to observe the number of new junior high schools being built with no specialized facilities (*see chart on preceding page*). In contrast, an unusually high number of *all* new secondary school *additions* are including industrial arts space (a by-product, undoubtedly, of NDEA Title VIII support for vocational technical programs).

Unfortunately, no comparable statistics* are available for construction of these facilities in previous years. During the last decade there has been some evidence that both subjects have been de-emphasized in the academically centered school systems. This may account for the substantial number of schools which have omitted "shop" or "home economics" facilities in new construction.

* These figures were compiled by the School Construction Reporting Services of School Management Magazines, Inc. between March, 1960 and February, 1961.

HOW TO

Start training

Your schools' industrial arts and vocational programs can be training grounds for engineering-college candidates. Here's how one county helps electronics-minded youngsters.

In Valhalla, N. Y., an exciting new program, designed to meet national defense needs in technical education and pre-engineering training, is ending its second year. Even in this short time, the program has demonstrated a remarkable ability to:

1. Improve coordination between high schools and colleges on scientific training.

2. Make it economically possible for hundreds of high schools to offer courses involving the use of expensive equipment and highly trained teachers.

3. Identify and train future engineers.

How the program works

The Valhalla program is under the auspices of the Board of Cooperative Educational Services in the second supervisory district of Westchester County, N. Y., which serves many of the county's independent school districts.

Each day at 8:30 a.m. and 12:30 p.m., special groups of students arrive. These students are not there for conventional "vocational education." They are coming to get technical training in pre-engineering subjects.

Each of them spends the morning or afternoon in his home school studying history, English, science and other courses of that nature. He takes no mathematics training during this time.

The students board buses at their home district and are taken to Valhalla. There, using the extensive facilities of the vocational school, they are given instruction in mathematics, in electronics theory, and in electronics lab. At the end of each school day, they return to their homes.

The Valhalla program is under the direction of Sune Engelbrektson, administrative assistant to the Board of Cooperative Services of Westchester County. The following article, describing the Valhalla program, is drawn from a tape-recorded interview with Mr. Engelbrektson.

engineers in high school

Q. How would you describe your new program? It isn't industrial arts and it isn't vocational education. What would you call it?

A. In a sense, it is vocational education, but it's the type of vocational education that is not necessarily meant for immediate use. We do have youngsters going out of the program who would be qualified to work as engineering aides or as technicians in the electronics industry. But we think of them as our future engineers. We are thinking in terms of perhaps six to 10 years in the future for these youngsters. And yet, it is a form of vocational education, because ultimately they will use the information they've gained with us in a vocation—in this case, electronic technology or engineering.

Q. Then, what you have here is a facility for vocational electronics teaching, used by academically tracked students?

A. That's correct. We send out circulars to the various schools in our area for youngsters who are so interested in electronics that at this point they probably are considering it for their life work. These are academically inclined youngsters. They follow an academic track. We require two years of math and two years of science before they are able to take our course.

Q. Your program begins in what grade?

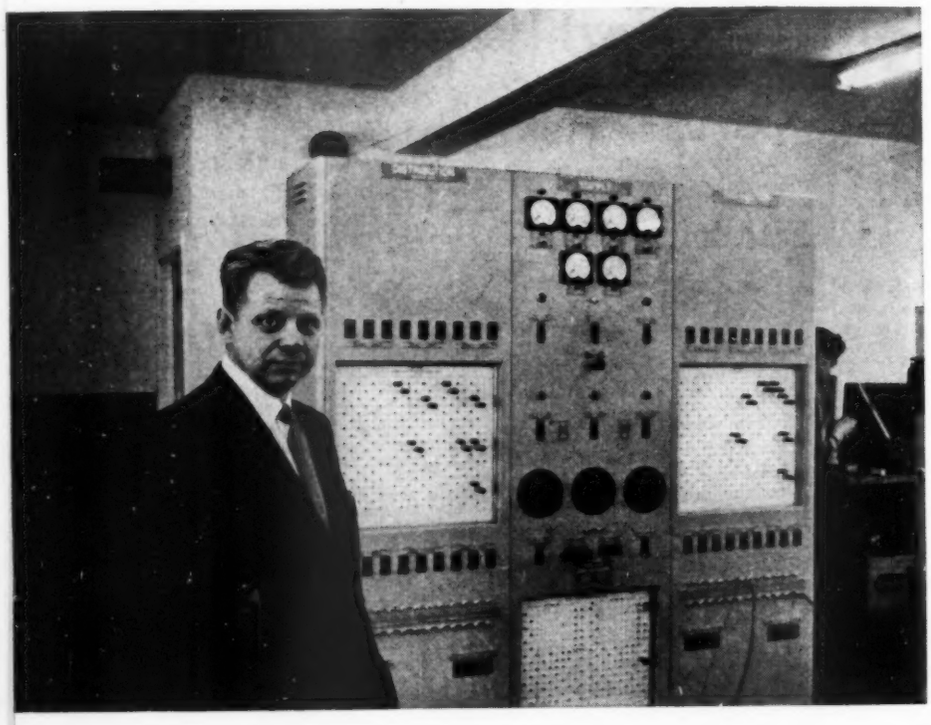
A. The 11th grade. So when students come to us, they've had two years of algebra and geometry, and two years of science. And then we recommend that they have physics and chemistry in the 11th and 12th years.

Q. Do you provide those courses here?

please turn page



"This is vocational education for academically oriented students who will probably go on to college."



A. No. We ask their home schools to provide the science. We provide the math in the 11th and 12th years.

Q. In other words, none of the science *per se* is taught here—it's taught back in the home school from which the student came?

A. That's right. However, about one-half of the physics course back in the home high schools revolves about electricity. We find our youngsters have a rather easy time of it when they reach the electricity unit in physics.

Q. When you speak of these prerequisites of two years of math and two years of science prior to coming into the 11th grade, does this apply to the vocationally oriented—the terminal students—as well as the academic students?

A. Any youngster who wishes to become an engineering aide must be academically oriented. He would be unable to function in industry. And this brings up a very interesting point: it isn't absolutely necessary for an engineering aide to go to college, but it's very, very desirable. Two-year community colleges are very important to our students because with two years of electronics under their belts already, if they attend a community college for two more years, they will have had four full years of training in electronics.

Q. At what level of competence would a student be with two years here and two years in a community college? Would it be equivalent to four years of normal engineering school?

A. No, not at all. First of all, they would not have covered the math that's necessary. These men are not training to become designers, but the testers of the design. In other words, an engineer might come forth with some ideas on paper. He puts various electronic components together. But he's not quite sure if these things work. So he must set up a testing situation, an experimental situation—it cannot be all theoretical. It is the electronics technician who will wire up these various components. He'll know how to use the electronic equipment that's at hand. He will use volt meters and various other metering devices and will run through various tests, keeping in mind the restrictions the engineer has on a certain piece of work.

Q. So this facility has been set up to accommodate technically interested and able students who are sent to you by various high schools in this area. They'll come here after spending half of the day in their own school on purely academic subjects such as English, science, foreign languages. The rest of the day they spend with you. This would apply to both the vocationally tracked children and the college bound. But how would you differentiate, when you receive these kids in 11th grade? From what you say, even the vocationally tracked kids must be pretty able, to cope with this course?

A. They are, but they don't take the same course. We have two electronics courses in two separate wings of the building. One is on a trade level and the other is on a technical level. The youngsters who have not had two years of math and two years of science would not be scheduled into the technical program.

Q. But don't both groups need a similar mathematics and science background?

A. No, it isn't necessary for the trade electronics boys because there will not be as much theoretical work in their program. There will be more practical work, such as repairs, building, trouble-shooting in electronic equipment. Up to this time, we've required ninth-grade math and some of the algebra necessary in our related work. We do get into algebra in this particular work but we do not get into the higher math.

Q. Suppose a district wants to put this program into its schools. How could it schedule something like

this? How could all the courses, that college bound students would have to take, be compacted so that they could take electronics all afternoon?

A. This is difficult—but it can be done. We're very fortunate because we have an enlightened group of guidance counselors. We have periodic meetings for the guidance counselors from the various schools. And at these meetings we brainstorm. We trade ideas. This is the *rationale* we've worked out: The youngster who is what we call a "liberal arts" student is going to take more than two years of a foreign language. This would eliminate him from our program. He can't fit it in. But we aren't looking for this student. We want the college bound youngster who plans to take a bachelor of science degree. Now, if you eliminate foreign language from the last two years of high school, a diligent student has time to take history or social studies, English, science and physical education where it is mandated. We teach him mathematics.

Q. Let's take a boy's typical day. What is his morning schedule?

A. He'd take English, social studies, science, and physical education in the morning. He cannot take a foreign language. If he is going to take a language, he would have had to have that language in the ninth and 10th grades.

Q. Isn't this dangerous? What if he gets in here and discovers that electronics isn't his cup of tea? Wouldn't he have trouble getting into a liberal arts college?

A. It would be inaccurate guidance on the part of the guidance counselor if this happened. We try to avoid this. For example, our candidate should have an interest in electronics to begin with. We don't try to pressure a youngster into electronics by telling him of the marvelous things that are going to happen in the future. He has to have a genuine interest. You find some youngsters who build their own radio sets at home. They're not provided with this sort of thing in school, so they do it entirely on their own as a hobby. At the same time, our candidate is mathematically inclined and he's an academic student. He's had two years of language already. This is the youngster we're looking for; and with two years of language he will get into an engineering school.

Q. During the morning this boy has taken English, social studies and science, and his physical education. Now, he's brought here. What does he do the rest of the day?

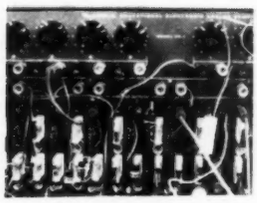
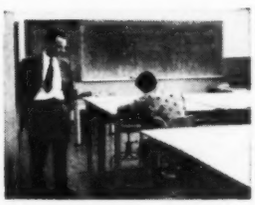
A. We have the laboratory and an adjacent room which is all-purpose. It's a drawing room, math room and theory room. We schedule the time according to the suggested curriculum that the state department of education provides. He has a double period of lab, one period of theory and one period of math—four periods in all (*see schedule page 92*).

Q. What time does this afternoon end?

A. He gets here at 12:30 and leaves at 3:30. He has four 45-minute periods, one right after the other. And I might add, at this point, that it's quite obvious that our

"It's quite obvious that youngsters in our program must be exceptional boys. They have to do a lot of work—for us and for their home schools."



SUBJECT		PERIODS PER WEEK		UNITS EARNED	
		1st yr.	2nd yr.	1st yr.	2nd yr.
Electronics theory		5	5	1	1
Laboratory		7	8	1	1
Drawing		3	2	½	½
Mathematics		5	5	1	1
TOTAL		20	20	3½	3½

youngster must be an exceptional boy. His work in English and social studies and science requires homework and outside preparation, and our related work in technology and theory requires outside preparation. So does the math.

Q. Could you make an estimate of how much homework a typical student has each night?

A. On our work, it would vary. In the beginning he would be spending more time in preparation because he's laying the foundation and we're spending quite a bit of time on theory. He may have been dabbling in electronics at home but setting these theoretical things down in their proper sequence would be a new experience. We find that, in the beginning, a youngster works a bit harder than he will after he has the foundation. So I would say a few hours of homework in the beginning, and then it would level out to about an hour a day.

Q. Do the academic students get what might be called practical work in this course? Do they build anything?

A. They're in a testing role but they ask us, all the time, "Can't we build something?" So we say, "Yes, you can. We'll supply you with all the necessary knowledge that you'll need, and with the equipment. But we won't provide time. Any building that you do, you'll have to do out of class." We had a youngster who built a transistor radio that way.

Q. Do your students penetrate college level math at all?

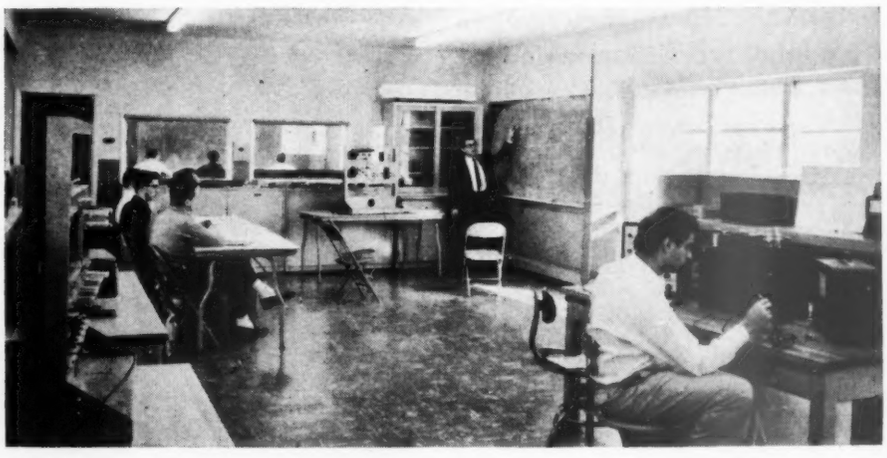
A. We don't attempt to do it.

Q. Suppose you had a big comprehensive high school. Could you put this program in there without any separate facility such as you have here?

A. I think a comprehensive high school should be able to do it better than we can because it doesn't lose an hour a day in transportation. Scheduling would be easier and the math would be taught by the regular math department. That would mean that the electronics

continued on page 96

Electronics-minded students in Valhalla get an opportunity to use expensive equipment that would not be available in most home schools. Teaching is also at a high level. Students are trained to become electronic technicians or engineers.



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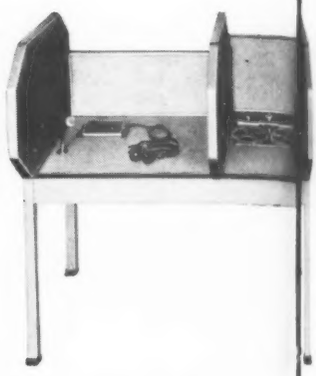
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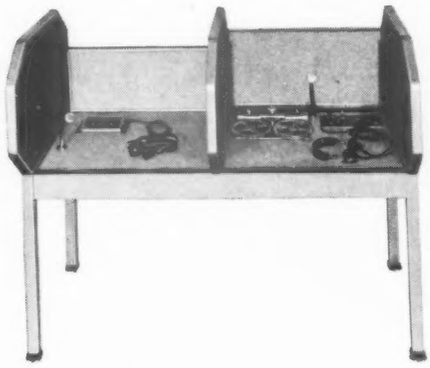


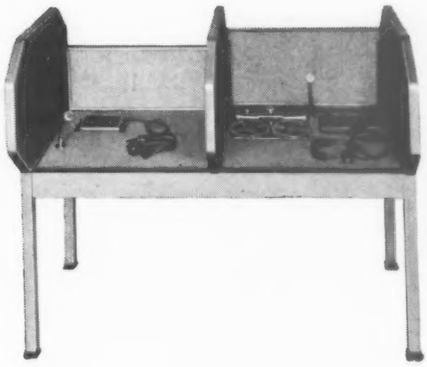
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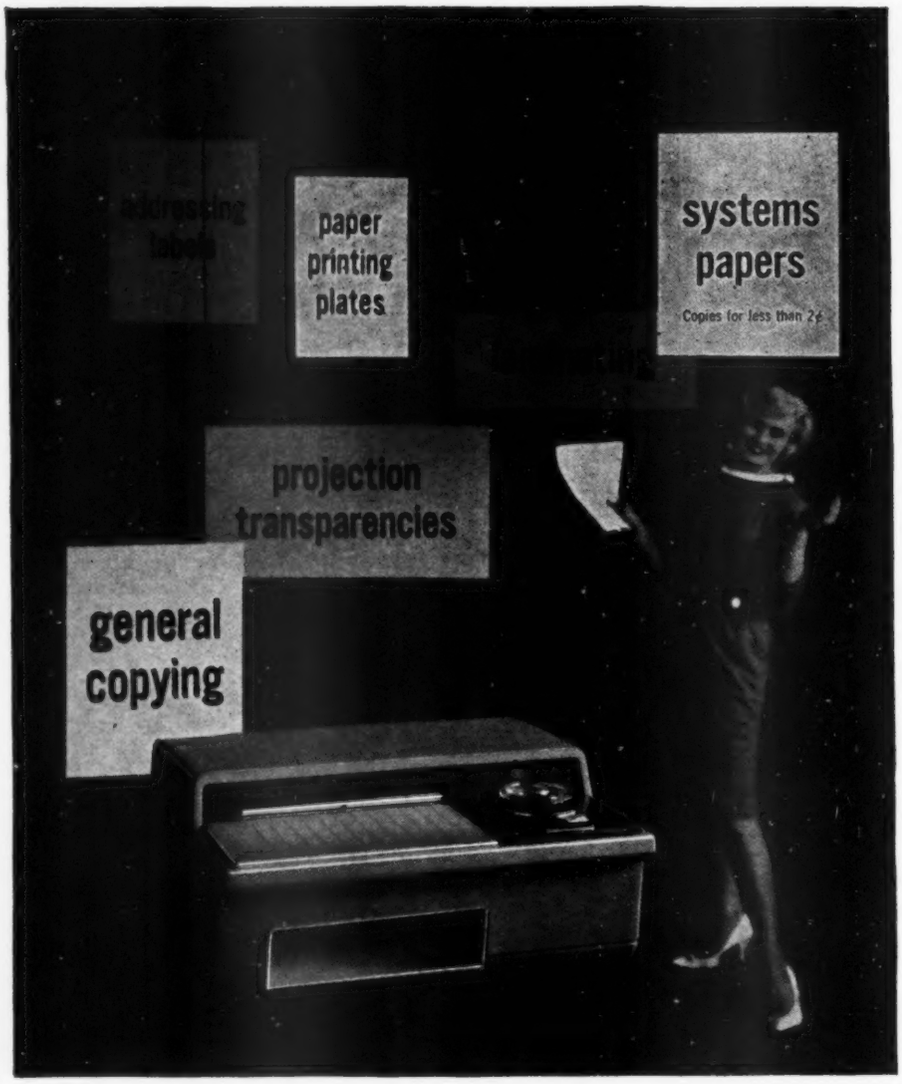
** See Yellow Pages "Recording Equipment"*

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teacher, and other members of the staff in the technical program, could actually concentrate on this alone. I think they should be able to do a much better job, and it certainly would be easier. It would help in guidance, too. Identification of able youngsters would be done with greater ease.

Q. What kind of teachers do you need to handle a program of this type?

A. According to our state department of education requirements, an electronics teacher must have three years experience as an electronics engineer plus 30 hours of teacher training before he can become certified as a teacher in this course. A teacher for our trade electronics, to differentiate this from the technical college entrance electronics, would require six years of experience in his particular specialty.

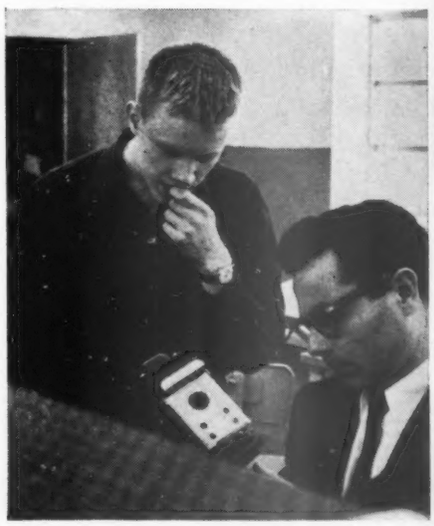
Q. How about the mathematics teacher? Same requirements?

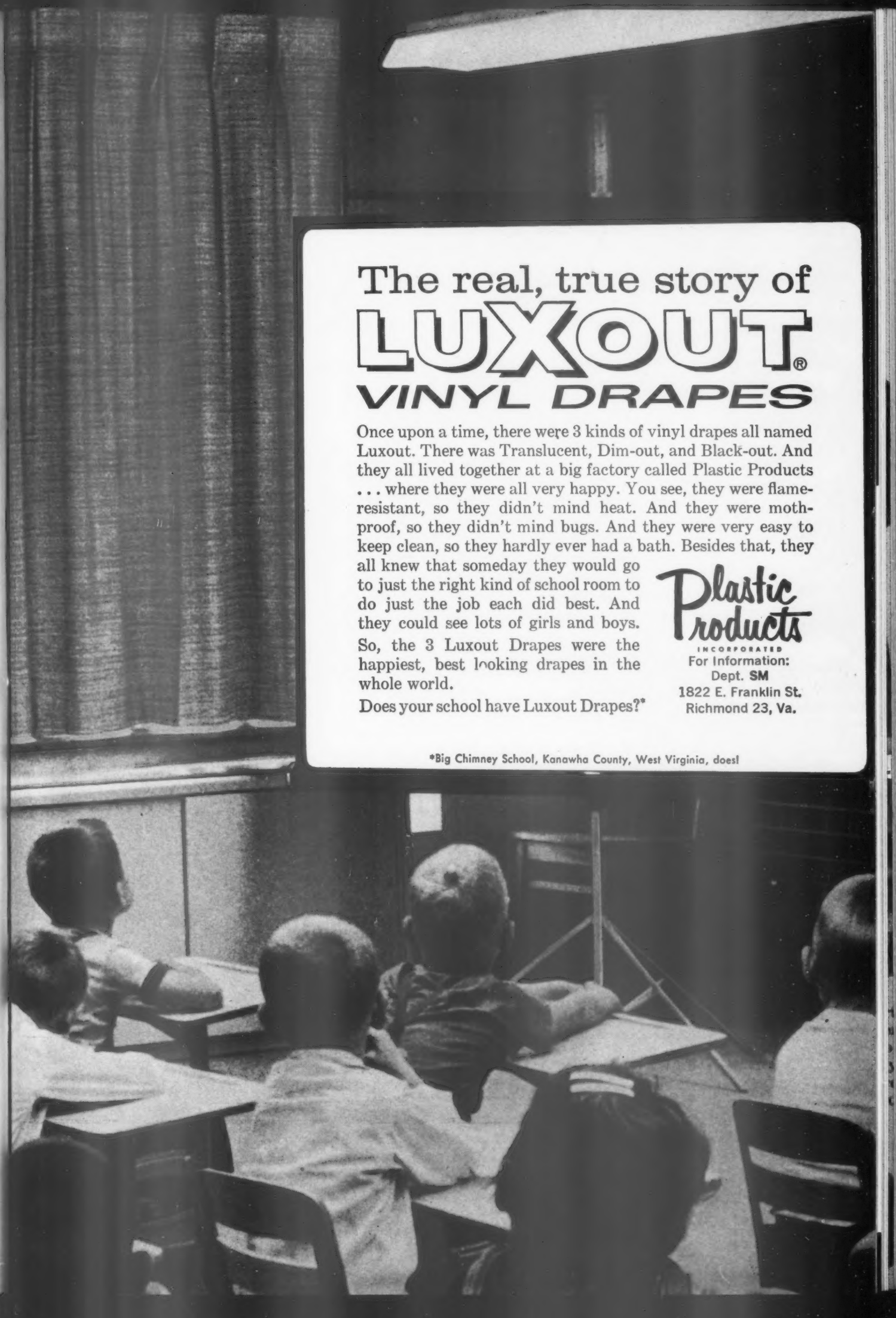
A. We have a licensed math teacher who teaches out of the standard textbooks.

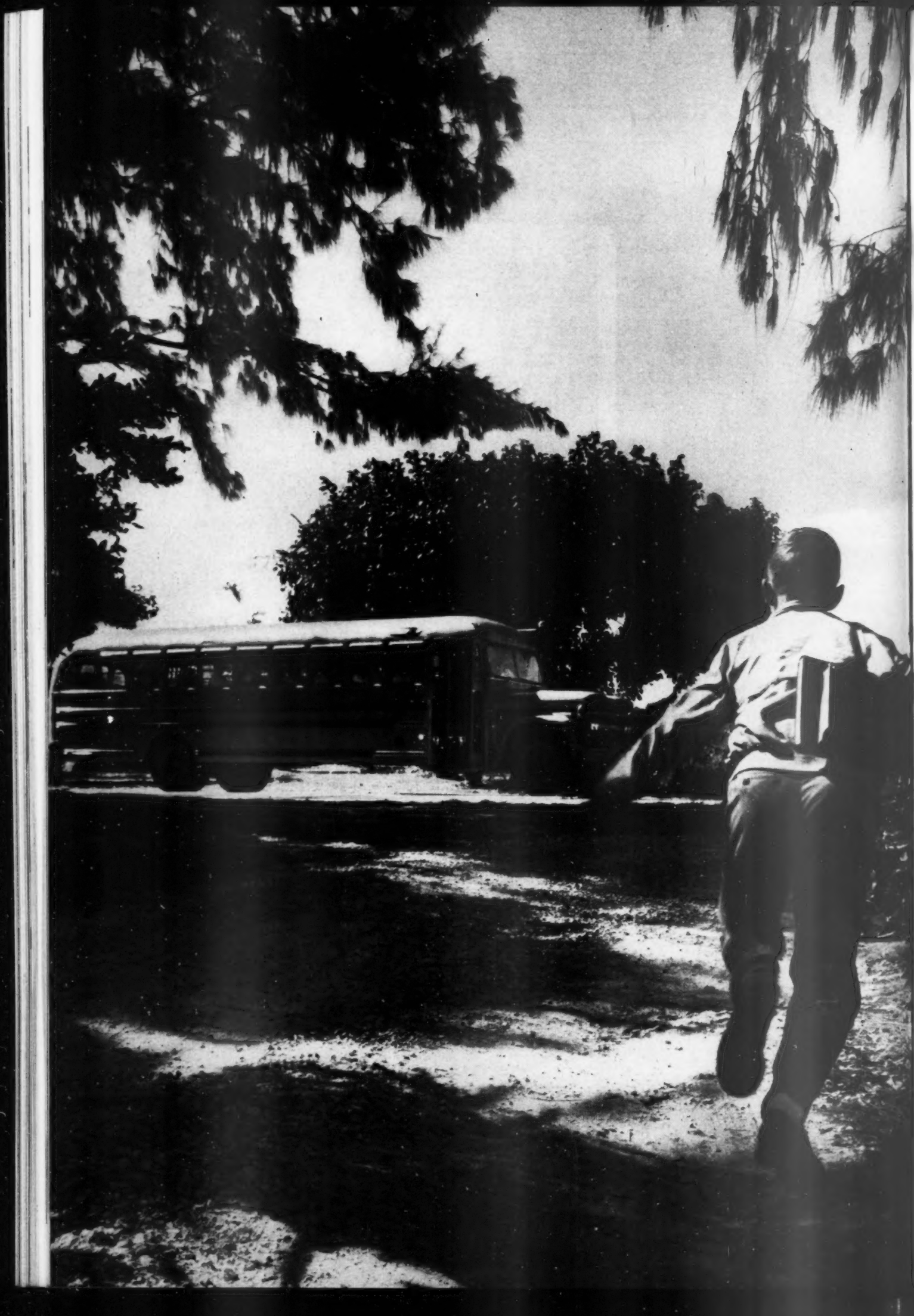
Q. Who teaches the course in theory?

A. The engineer. In essence, the technical course consists of a laboratory, the theory and the drawing. The math is separate. These two teachers have an opportunity for correlation so that they tie in together closely. But our main purpose in the math teaching here is

"A comprehensive high school should be able to improve on this program."




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Once upon a time, there were 3 kinds of vinyl drapes all named Luxout. There was Translucent, Dim-out, and Black-out. And they all lived together at a big factory called Plastic Products . . . where they were all very happy. You see, they were flame-resistant, so they didn't mind heat. And they were moth-proof, so they didn't mind bugs. And they were very easy to keep clean, so they hardly ever had a bath. Besides that, they all knew that someday they would go to just the right kind of school room to do just the job each did best. And they could see lots of girls and boys. So, the 3 Luxout Drapes were the happiest, best looking drapes in the whole world.
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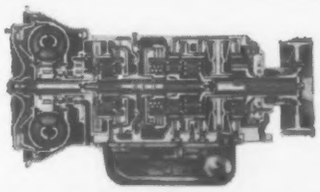
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Chevrolet school buses with Independent Front Suspension were first introduced in 1959. Since then, thousands of these units have accumulated millions of operational miles. And enthusiastic reports from owners offer strong evidence that these buses have proved their worth many times over in terms of better all-around performance.

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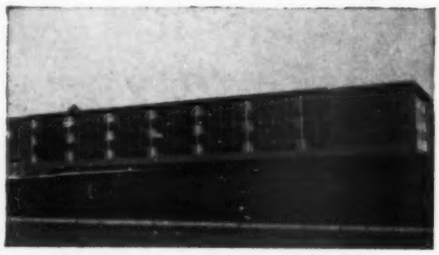


CHEVROLET POWERMATIC—Here's a fully automatic transmission that's ideal for school bus use. Drivers merely select one of four separate driving ranges at the start of their route and Powermatic takes over; shifts automatically through six forward speeds as load and road conditions demand. With Powermatic, drivers can devote full attention and effort to their driving duties with no distraction due to shifting. And Powermatic's torque converter action cushions drive-line starting and shifting shocks for longer component wear. Optional at extra cost on Series 60 and 70 Chevrolet school bus models.

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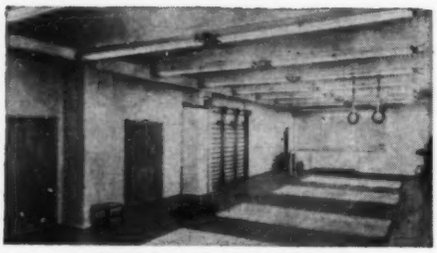
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to be certain we cover the requirements of math as set up by the state department of education.

Q. If a school wishes to set up a technical program, could potential teachers be recruited from industry?

A. We've given this some thought. In fact, if there is an electronics establishment nearby that employs engineers, I believe it might release men for a half day so that they could spend time training our young people. It might seem, at first, that an employer would say, "I can't afford to release an engineer." But then, if we recall that many of the engineers today are doing a technician's work because there is a great shortage of technicians, it would be more than economically feasible for the employer to help train technicians. It would increase his potential supply.

Q. Mr. Engelbrektson, did you start your technical program at the same time as your trade program, or did one grow out of the other?

A. They started simultaneously. We made a survey several years ago. We covered the needs of industry in this area. We recognized



"We were able to obtain Title VIII money for supplies and equipment."

that we had two-year institutions, such as community colleges, identifying and training youngsters as technicians. We wondered if we could get into this on the secondary level. We got financial help under Title VIII of the National Defense Act.

Q. What did that money have to be spent for?

A. Equipment and supplies for technical education only. So, when we set up our two programs, they were financed differently. One was financed through Title VIII and the other was financed through local funds and state aid. **End**

"In essence, the technical course consists of a laboratory, the theory and the drawing."





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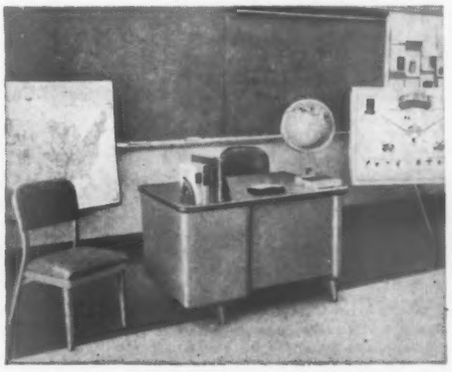
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School Public Relations Awards

Has your district done an outstanding job in any aspect of public relations? Here's your opportunity to gain national recognition and, at the same time, to share your 'know-how' with others.

■ ■ ■ You will find on the following pages an invitation to bring any of your outstanding local public relations efforts to the attention of a national audience.

These new awards, jointly sponsored by the School Board Publications Association at Rutgers University, and SCHOOL MANAGEMENT magazine, are open to any public district. Individual awards will be made in five categories:

1. ***Outstanding School District Periodicals.***
2. ***Outstanding New School Building Campaigns.***
3. ***Outstanding Annual Reports On School Activities.***
4. ***Outstanding Teacher Recruitment Brochures.***
5. ***Outstanding Special Purpose Projects.***

The competition is easy to enter. Merely fill in the form on the next page and attach a copy of your entry. "Fancy" presentations are not necessary and will not be considered by the judges in selecting award winners.

You may submit one or more entries for your district.

Now please turn the page for full details.

Entry form

Note: If you want to submit an entry for more than one category, please use a separate entry blank. You need not *obtain a duplicate of this form. Simply provide the information indicated below on a sheet of paper or your letterhead.*

Category for this entry: _____

School district: _____

Address: _____

City and state: _____

Number of pupils in district: _____

Submitted by: _____ **Title:** _____

Describe the objective of the project which you are entering (use additional paper if more space is needed). Refer to the criteria on the opposite page.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Return to: School Board Publications Association, Rutgers—The State University, 46 College Avenue, New Brunswick, New Jersey.

How to submit your district's entry

1. There are five separate categories you may enter. They are listed below. You may enter just one category, or as many as you choose. And you may enter more than one example in category #5 (outstanding special purpose project).

2. The examples of good public relations which you submit must have been released by your district during 1960 or 1961.

3. Each entry you submit must be mailed in a separate envelope.

4. The category which you are entering must be clearly marked *on the envelope* in which your entry is mailed. This will facilitate sorting by the judges.

5. All entries must be postmarked June 15, 1961 or earlier. Award winners will be announced in the September issue of SCHOOL MANAGEMENT.

6. Elaborate presentations are not expected, nor will the judges give preference to such entries.

7. No entries can be returned.

The categories

1. Outstanding school district periodicals
Criteria: Any regular externally circulated periodical (newsletter, magazine, paper, etc.) is eligible. At least three different issues must be submitted. Tell who receives it, how frequently it is published, your objectives in preparing it, who does the editing, and any evidence you have of its effectiveness.

2. Outstanding new school building campaigns
Criteria: A printed piece sent by the school district to the public to explain the need for a proposed new school building program. The entry may be a single folder or brochure, or a whole "campaign." Tell how it was distributed, who prepared it, and any evidence you have of its effectiveness.

3. Outstanding annual reports on school activities
Criteria: A printed piece sent to the public, or to parents, to explain your district's progress and activities during the preceding school year. Tell how it was distributed, who prepared it, its objectives, and any evidence you have of its effectiveness.

4. Outstanding teacher recruitment brochures
Criteria: A printed piece (and any letters which may have accompanied it) which was designed to attract outstanding teacher candidates. Tell why it was prepared, how it was distributed, who prepared it, and any evidence you have of its effectiveness.

5. Outstanding special purpose projects
Multiple entries can be made in this category.
Criteria: Any printed piece designed to help solve a special communications problem. Here are a few examples of "special" projects: a school bond financial prospectus; an insert to accompany college entrance applications; a new school dedication booklet; a budget report; a new teacher orientation folder; etc. Tell why the piece was prepared, how it is or was used, who prepared it, and any evidence you have of its effectiveness.

For more detail, turn the page . . .

Questions & answers about your entries

Question: *Who will judge the awards?*

Answer: A panel of judges is being selected by the School Board Publications Association, which is affiliated with Rutgers—The State University (New Jersey). The judging panel will be made up of outstanding individuals in education and the communications arts.

Question: *What will an award-winner receive?*

Answer: A handsome citation will be presented to all award winners. Multiple awards in all categories will be made when, in the judges' opinion, they are justified. Certificates of merit will be presented to other exceptionally good entries. The winning projects will be announced in SCHOOL MANAGEMENT and described and illustrated in the same, or subsequent, issues of the magazine. The school district, rather than an individual, will be cited.

Question: *Can we enter the same material in more than one category?*

Answer: Yes. For example, if your regular periodical to the community devoted a whole issue to a new school building campaign, you may enter that issue in two categories. But please submit them twice, in separate envelopes, with separate entry forms.

Question: *Will an inexpensive job done by a small school district be forced to compete with entries from larger districts with more funds available for public relations?*

Answer: No. That's why multiple citations will be made.

Question: *Is it necessary to submit a long written explanation of the objectives of the entry?*

Answer: No. Say as much as you feel is necessary to guide the judges. A single typewritten page is sufficient, or it can be longer. We will come back to you, if necessary, to obtain additional information for the magazine articles we expect to write about the award winners and the outstanding merit designees.

Question: *Is mimeographed or offset printed material eligible?*

Answer: Yes.

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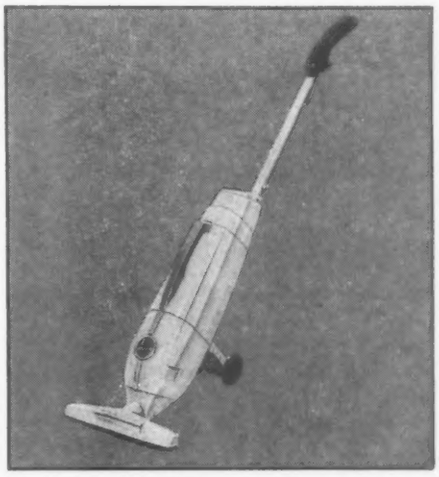
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SM-5

Of suits & zones & teachers' moans

A former superintendent takes a new look at his old job and suggests that some of the most vexing problems may have their lighter sides.

By CLARENCE HINES

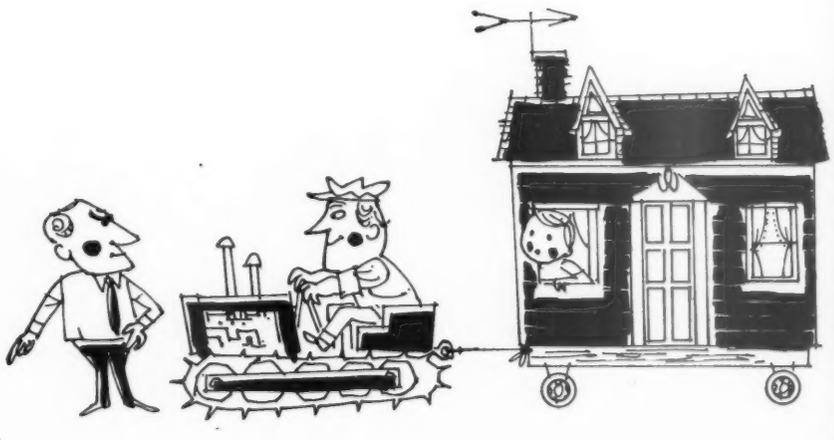
Professor of Education, University of Oregon

Editor's note: *The following article represents a departure from established editorial policy of this magazine. Dr. Hines, in submitting it for possible publication, had stated that it was "intended to be at least slightly in a humorous vein." Frankly, with that introduction, the editors approached his manuscript with great skepticism. However, when the first page proved interesting and the second evoked a few chuckles, our skepticism began to fade away. By the time the fourth page had been turned, the manuscript had won its right to be published.*

This article does not present a practical solution to a school management problem, but it may help schoolmen see some difficulties in a softer light.

■ ■ ■ Now that I am a refugee from the public school battleground, safe at least for the time being in an eight by 10 ivy-covered ivory tower in a state university, I find time to meditate occasionally. One of the frequent subjects is that of the joys and frustrations which I experienced as a school superintendent. I recall that at the time some things seemed quite disturbing to me, but now, after three years, they seem more amusing than disturbing. In a way, however, I view them as one might a sore thumb that has gotten well.

One of the things which comes to



"He said, somewhat profanely, that he would hook his house to a tractor and pull it across the road."

mind as I think about my experiences as a public school administrator is the many complaints which came to me during that period. What prompts people to complain, I wonder? Is it a right bestowed upon them by the Almighty? Is it a right enjoyed by free men everywhere? Is it because the complainers pay taxes? Is it because the Constitution guarantees to freeborn Americans the right to petition for redress of grievances, and a complaint represents a real or an imagined grievance? Or is it, as my grandfather used to say, "just plain cussedness"?

Frankly, I have not been able to decide what it is; but I do know that much of my time was taken up with listening to, sympathizing with, adjusting or denying complaints.

Boundary changes

It is possible that no action a school board takes will cause as many complaints as changing the boundaries of a school attendance area. Such action is very disturbing to parents, especially if it requires their children to go in another direction to attend school. It becomes far more serious if the direction they must go is away from the community center.

In my experience, many hours of important time at school board meetings have been spent in listening to parents complain about the fact that their children would have to attend a school other than the one which they had previously attended. It makes no difference that the school they will attend is newer, safer, less crowded, and perhaps even closer to their homes. The significant thing is that there has been a change made and there is a complaint to register.

Several instances stand out quite clearly. One is of a man who had bought a house in a certain elementary school attendance area. As the community grew, another school, to serve the south part of the area, was built and a boundary change was made. The man contended that his children should attend the old school for as long as he was to occupy his house because the realtor who had sold him the place had guaranteed him this right. His complaint was taken to an attorney before the man realized that he had not secured the right of attendance with the deed to his property.



"He took many pictures of the ditch, of the water in it, and of children retrieving balls."

Another complaint had a happier ending for the person making it. In this instance, a boundary change in a suburban attendance area placed his house, which was on the west side of the road, in a new school zone. When his complaint availed him no satisfaction, he said, somewhat profanely, that he would hook his house to a tractor and pull it across the road to property on the other side. Since the house was not a large one, he moved it quite easily, and his five children continued to attend the school he preferred. All complaints, however, are not so easily settled.

When a large number of people are involved in an attendance zone change, it should be approached cautiously and with careful study. A good approach is to use a committee of parents representing the PTA groups to work with the school principals to determine what changes should be made and to make recommendations to the board. Such action will not eliminate complaints, but it will help to hold them to a minimum. Although the complainants may be the most vocal members of the community group affected, careful planning and study will insure that they are a minority in numbers at any rate.

Lawsuit threatened

Almost every school superintendent is threatened with a lawsuit at some time. Some actually get sued, too, for there is nothing that will keep a person with money enough to hire a lawyer and pay filing fees from bringing suit over the most trivial matter. Although I never have been sued, I have been pretty close to it on at least two occasions. How I kept from it, I will never know. Perhaps, I have just lived right.

One such instance involved an outside stairway to the basement of an old school building. Although it had been there since the school was built in the early 1920's, no one had ever fallen down the stairs or been hurt on them. The fire department wanted them left as an escape in the event of a fire. One father started in complaining about the stairway and the hazard to his child as soon as the child entered first grade. He complained to the teacher, to the building principal, to the superintendent and to the school board members individually and collectively. Then he went to an attorney, after threatening to bring suit. He received little encouragement. His parting shot was to tell me that if his child ever did get hurt, he would not only sue the school district, but he would shoot me as well. Fortu-

nately, the child soon became interested in other things than the "attractive nuisance" and was never injured.

Another threatened legal action resulted from an open drainage ditch on one side of a school site development. The ditch had been there many years, at least as long as the memory of some of the older inhabitants of the area. No child had ever fallen in it, winter or summer, and it only had water during the rainy winter months. As children began to use the new play area, however, an occasional ball would roll into the ditch, and a child would go to fish it out. One irate patron, whose property abutted the ditch on the other side, demanded that the school district place drain tile in the ditch and cover it over. When his complaint was not given favorable consideration, chiefly because the ditch was a city responsibility since it followed and was located in a city alleyway, he, too, threatened to sue. He took many pictures of the ditch, of the water in it, and of children retrieving balls. Although he planned to use these as evidence in his suit, he was finally persuaded that he did not have an actionable cause.

Some complaints humorous

Some complaints are humorous even at the time they are made. One involved a telephone call from an elementary school patron about children playing in the outside breezeway of the school on weekends with possible hazard to themselves and the school property. After talking for almost an hour, repeating the same arguments over and over again, he was finally told that the superintendent could not personally police the school on weekends and that he, the superintendent, would have to terminate the conversation as he had a meeting to attend. The man's final statement was a gem: "I knew you couldn't do anything about it, but you get paid for listening."

Two complaints, I recall, came from well educated women who should have known better. One involved the chairs for a new high school auditorium, and the other was in regard to the toilet fixtures to be used in the building.



"He guessed he would have to give up hunting because of the district's narrow-minded policy."

A news story in the local paper informed the community that the school board had selected regular theatre-type seats for the new auditorium at a cost of about $20 a seat. One woman, after complaining about the cost of the seats, asked why folding chairs could not have been used. My only reply, at least the only one I could think of at the time, was that it seemed rather absurd to build a $400,000 auditorium, seating 2,000 people, and equip it with folding chairs. She was not satisfied, but she had her answer.

I suppose that every community that builds a high school encounters a certain amount of criticism because of the expenditure involved. Often it represents the largest single item of public expense in the community. Some people feel this burden more than others and criticize for this reason. Since they usually cannot argue very effectively against the need for the building, they pick it to pieces with one criticism after another.

Such was the case of the lady who started the story that the high school currently being built would have pink toilet fixtures for the girls and blue ones for the boys. She wondered if this were not a terrible waste of the taxpayers' money. By the time I got hold of the story, it had already reached many ears. It took a good deal of telling to convince the people that the origin of the story was in the color of the ceramic tile used for sanitary purposes on the walls, and not the fixtures on which the boys and girls would sit.

Another criticism came when a new high school was built with two fireplaces, one in the student lounge and another in the home living room. The expenditures for both were carefully scrutinized by the lay planning committee, and the school board, which considered them justified. This did not, however, allay or alleviate criticism from some sources. I finally ended the criticism when I was asked in a public meeting how I could justify such a "waste of the taxpayers' money." After explaining why the fireplaces were built, the one to simulate home living conditions and the other to provide a wholesome meeting place for students, I concluded with this statement: "And you know how hard it is to heat an awfully large building such as this with fewer than two fireplaces." No more criticism was heard from that particular source.

Teacher complaints

Teacher complaints are so constant in most school systems that they are almost taken for granted. If they suddenly stopped, even for a short time, one might wonder if the system were falling apart or something. While most criticisms have to do with the inadequacy of salaries and the unreasonableness of teaching load, some do deal with lighter things.

I recall one that involved a deduction from a male teacher's pay

for taking a week off to go hunting. When he got his check at the end of the month, and found that he had been docked for five days at $28 a day, he screamed so loud that he could have been heard for miles.

He lost no time in making his way to the superintendent to complain about the unreasonableness of the deduction which he termed "nothing more than highway robbery." When it was explained to him that going hunting was a personal, not a district expense, that his annual salary divided by the number of days of duty amounted to $28 a day, and that he had contracted with the district to give it 187 days of work during the year, he was amazed. He had, he said, been going hunting for years, and it had never cost him anything like that amount before. He left, muttering to the effect that he guessed that he would have to give up hunting if the district was going to maintain that kind of narrow-minded policy.

Another complaint was voiced by a primary teacher who was assigned a new room in an addition to an old building. It was much larger, lighter, more colorful and better equipped than the room in which she had taught for years. Feeling sure that she was happier in her new room than in the old one, I asked her how she liked the room. She took 15 minutes to tell me. When she had finished, her complaint amounted to this: The architect, in selecting the colors for the room, had not chosen a single one that would go with any of the colors for the holidays for which teachers and children ordinarily decorate their rooms. Complaint justified; teacher satisfied.

I used to think that teachers, pupils and parents did nothing on weekends except to think up complaints to dump in my lap on Monday morning. Taking care of these, or delegating them to someone else if that were possible, constituted a good part of my first-of-the-week work load. As I think back on these things now, dealing with them was just a part of my job of getting along with people. They thought they had a right to complain, it relieved their tensions, and, as the man said, I got paid to listen. **End**

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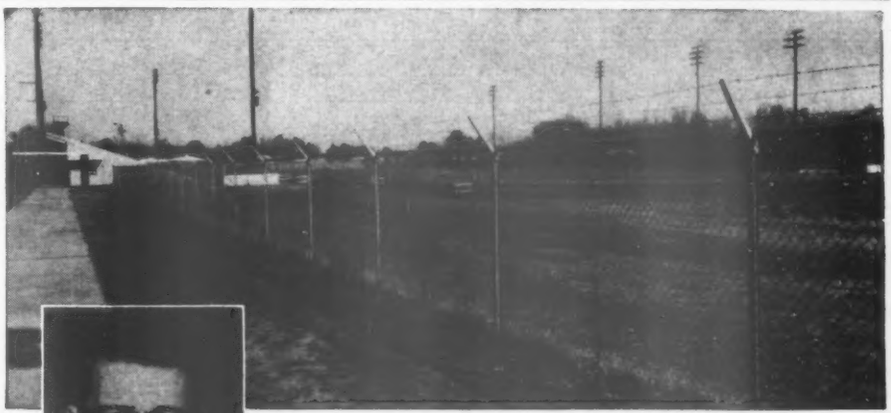
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(Circle number 736 for more information)

How to save money on fire insurance

Here's how one school district, after careful investigation, secured a policy that provided all the protection needed and saved 40% on premiums.

■ ■ ■ Our schools represent the largest single financial investment made by the taxpayers of our community.

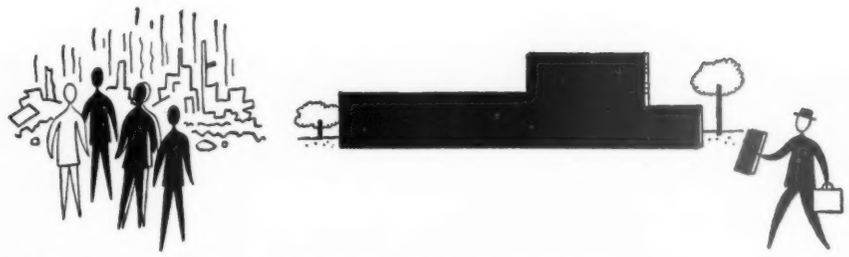
Realizing this, we knew we had to protect that investment with the best available fire insurance. The question we faced was, "What kind of fire insurance?"

We had a choice of two common types of insurance contracts:

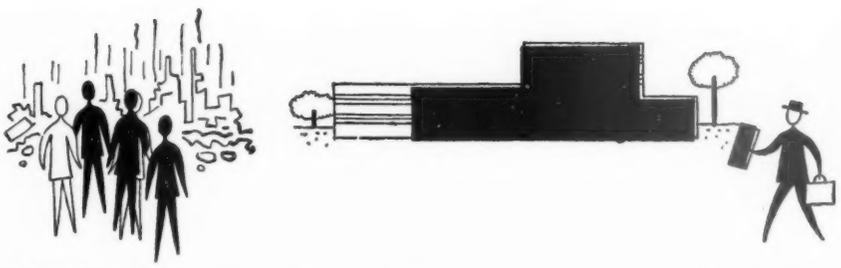
1. Flat-rate. Under this plan, buildings are insured for any percent of their value, the district pays a flat premium, and the insuring company will pay for a loss up to the face amount of the policy. However, the company will not pay more than a destroyed building was worth, regardless of the amount of the policy.

2. Co-insurance. Property is insured for a high percentage of its assessed valuation. Under 80% co-insurance, for example, if a building is assessed at $100,000, it can be insured to a maximum of $80,000. Take a case where a structure is insured for only $50,000 under this policy. If the building burns, the company will pay only 5/8 ($50,000/$80,000) of any damages up to $50,000, and the school board must make up the remainder. Since the school board becomes a partner (co-insurer) in the policy, the premiums are generally lower.

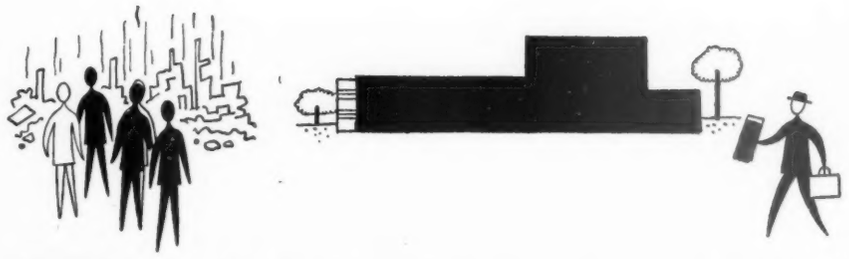
Extended coverage, usually in the form of an endorsement, is available



FLAT-RATE: *District covered up to face amount of policy.*



CO-INSURANCE: *District covered for percentage of property valuation.*



DEDUCTIBLE: *First $1,000 damages paid by district, balance by Insurer*

By ROBERT G. KATZENMEYER,

Clerk-Treasurer, Kent City School District, Kent, Ohio

for flat-rate and co-insurance by paying an additional premium. Extended coverage means protection against hail, windstorm, smoke, explosion, etc.

Our school board carried an 80% co-insurance policy until last year. The contract, written for fire, vandalism, malicious mischief and extended coverage, required an annual premium of about $6,000.

Then one of our board members, who is an insurance broker, directed our attention to a third relatively new form of insurance—institutional property contracts which featured "deductible" clauses. These policies offered ample protection in return for lower premiums. Our board was so impressed that it bought a blanket policy with a deductible clause, similar to that found in automobile coverage, for $3,600. We saved about $2,400 the first year.

And we expect additional savings. The contract is written on an annual basis. When it is renewed, each succeeding premium will be only 90% of the first year's premium.

Furthermore, the policy insures all property for 100% of valuation, rather than 80% under the former co-insurance policy. It also includes extended coverage, vandalism, malicious mischief, $10,000 coverage on employees' and students' property, $25,000 on school property off-premises, and $5,000 "extra expense" coverage.

The $1,000 deductible provision is the feature which enabled our district to acquire all of this additional insurance plus a reduction in premium. According to the terms of the policy, the school board will assume all damages up to $1,000 on each occurrence. The company will pay all damages over that amount.

At first, we were reluctant to accept deductible fire insurance. But when we analyzed our insurance claims over the past seven years, we found that if the district had been covered with a $1,000 deductible policy, small out-of-pocket payments would have been made only twice. Meanwhile, we would still have been covered for major fires.

Our dollar savings in premiums would have amounted to over $16,000 during the same seven-year period. This proved to us that a deductible clause is not the undesirable "gimmick" it appears to be.

The policy covers every building in the district. Should one building be destroyed, the policy covers replacement regardless of cost. If all buildings were destroyed simultaneously, the policy covers replacement regardless of cost, but with a ceiling expenditure in the amount of the "agreed valuation".

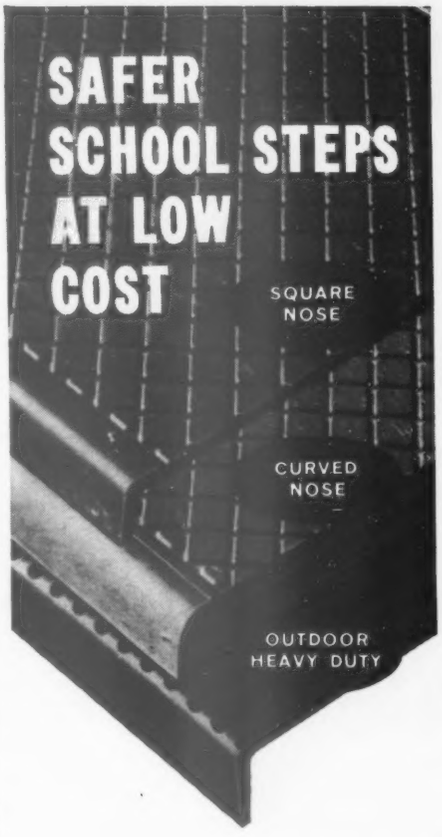
Agreed valuation is a key to the policy's terms. Before the policy was signed, representatives of the insurance company and the school board, and a professional appraisal team, inspected all the district's buildings. They agreed on a valuation and the policy was written for this amount.

The insurance company did not specify that professional appraisers had to estimate the value of the buildings, but we felt that $6 million in assets was a large enough figure to command professional appraisal. We also knew that a perpetual inventory could be started and kept by professionals at costs no greater than those for a similar job turned in by our own personnel.

The policy has these "musts" for our school board.

1. Before each renewal of the contract, the insurance company will inspect for fire hazards; corrective recommendations must be followed.
2. Qualified representatives of the school board must make quarterly inspections of the buildings, checking and rectifying any hazards.
3. The policy must produce a premium of at least $1,000 annually.

Needless to say, we are pleased with this policy. We have found no better way to protect our taxpayers' $6 million investment. **End**



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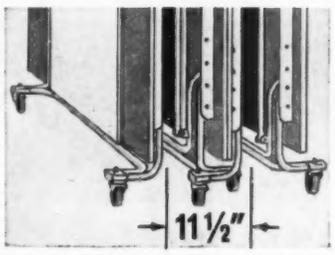




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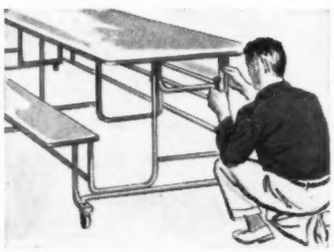
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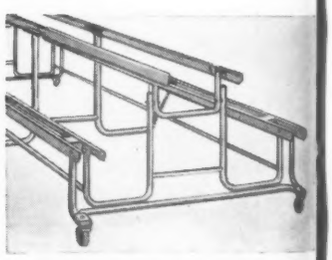
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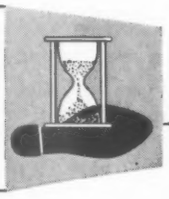
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(Circle number 726 for more information)

Do your schools 'welcome' THEF?



Many unprotected school buildings actually invite vandalism, burglary and theft. Here are some inexpensive, common sense tips to help you discourage and prevent these crimes.

By JOHN GREENHALGH, JR.
Director of School Business Affairs
Warwick, R.I.

■ ■ ■ Are you setting out the welcome mat for theft and vandalism in your schools?

An open coal chute, or a darkened interior, not only makes illegal entry easy—it may actually invite burglary and theft.

Many of the best methods of physically protecting a school are the easiest to implement and the least expensive. Furthermore, it is far less bother to discourage a thief than it is to catch him—either "in the act" or after.

For example, in Fall River, Mass., a school was recently destroyed by fire because a prowler, gaining entrance to the school, lit matches to find his way through the darkened interior. The matches were carelessly discarded and touched off a blaze. If dim night lights had been on in the building:

1. The prowler might have been discouraged by the light;

2. If he entered the building, he would not have needed matches to find his way; and,

3. The police or a neighbor might have seen his moving silhouette.

School buildings everywhere are becoming an increasingly attractive target for theft and vandalism. In our district, we have instituted some common sense plant protection methods which have reduced the probability of vandalism and theft.

Large shrubs are excellent hiding places for a would-be entrant until the way is clear, and long driveways give ample warning of approaching police patrols. We have these conditions in our schools; but the hazards have been reduced by establishing roadblocks, such as chains, gates, or sawhorses, at the entrances of the drives. Local police or fire department vehicles can circumvent these roadblocks in emergencies, but they usually keep unauthorized vehicles from entering the area. Our shrubbery has been kept to a minimum near the schools.

We have also installed inexpensive wire screening on ground level windows of storerooms and heating rooms. Although unattractive, they protect against unauthorized entry and breakage. However, we do not use screens on windows which students need as emergency exits.

Our external door locks and hinges are examined regularly to determine their resistance to prying and tampering. Hinges in our schools are of the fixed-pin type and are mounted so that the faces through which screws are fastened fold flat between the door and the door jamb. If external locks still work themselves loose after adjustment, a small metal plate or a molding strip is mounted on the surface to cover the gap at the lock.

We have found that cylinder type locks are best for external doors. Skeleton type locks are not only the easiest to activate with poorly fitting keys or probing instruments, but master keys can be purchased in most hardware stores.

When evening police patrols are available, they are scheduled at irregular intervals so that no pattern or timetable can be plotted by prospective intruders. Police are asked to check every door of our buildings, and, if an unlocked door is found, they have instructions to telephone the responsible person, who immediately makes an appraisal to determine if anything has been disturbed. This is done regardless of the time. If the door was left unlocked through carelessness, the oversight is less likely to recur.

A watchman is one of the best

Published as a Public Service by Weber Costello Co.



Beware improper chalkboard maintenance

ANY chalkboard will give better, longer service if given proper care. For example, under no circumstances should oil or oily rags be used to clean chalkboards. Cleaners or chalkboard cloths impregnated with kerosene, caustic soda or any harsh chemicals should be avoided. Wash chalkboards only when necessary and then use clear water, rinse with clear water and dry thoroughly. Dry cleaning with an eraser followed by cleaning with a chamois or soft cloth is easiest and best—helps to prevent "chalkboard glare" and "gray effect"

Do not use crayons, or colored chalk not designed for chalkboards. Do not use cellulose tape to fasten papers to the board. (Never use fixative sprays, adhesives nor paints.) Be sure that erasers are cleaned regularly so that they actually erase instead of putting chalk dust back on the board. New chalkboard should be properly "broken-in". Use a good grade of chalk to assure more "mileage" and better erasing.

These and other helpful hints are contained in a booklet free to teachers, principals, custodians, school boards.



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security safeguards that can be obtained. But if a watchman's salary can be justified, it is also worth the expense to secure a healthy and active person who can cope with whatever emergencies he is likely to encounter. Furthermore, the watchman should carry a recording clock, and key stations should be established at various parts of the building. As the watchman makes his rounds, he inserts the keys into the clock, thus providing a record of his inspection. This not only serves as a security patrol, but as a fire patrol which may also reduce insurance rates.

Though schools offer relatively little cash inducement for burglary, office, shop, audio-visual and laboratory equipment is attractive to thieves. Here are some pointers for protecting this equipment:

Typewriters and office machinery can be bolted to desks or utility tables. Projectors and television receivers can be mounted on portable projection stands, and electrical instruments in the laboratories and shops can be chained to panels and workbenches. Though these precautions do not guarantee the items against theft, they make theft more difficult.

We keep detailed records of equipment in our schools. File cards identify each piece of equipment by size, model number, serial number, color, and special features or accessories. If equipment is known to be missing, we notify repairmen, police, and distributors, giving them pertinent details and asking that they inform school authorities when and if the missing items are brought in. We also take the precaution of marking or labeling our equipment in an inconspicuous place, so that a repairman can quickly identify the equipment and notify the school without having been alerted.

Last December, for example, an audiometer belonging to the Warwick schools was stolen from a teacher's automobile. A card, taped to the underside of the audiometer's base, identified the machine as school property. About two hours after the theft, the audiometer was brought to a pawn shop. The broker summoned police, the thief was apprehended, and the instrument was returned to the school.

One universal problem of schoolmen is the management of keys. The more keys in circulation, the greater the probability of misappropriation or loss, and the lesser the degree of security. Buildings with branching corridors or wing-like arrangements lend themselves to a system of zoned master-key locks. If one of these master keys is misplaced, only one area's locks need alteration.

Our keys are issued on a "need" basis. We also maintain a register of duplicate keys and demand the return of keys by personnel leaving the employ of the schools or being transferred. Old keys are thrown out. (The same principle applies to combinations of vaults and safes. We restrict them to the fewest people possible, and the combinations are changed regularly.)

Through experience, we have learned to use locks which must be locked with a key, avoiding those with spring latches. This eliminates the possibility of locking keys in a room or closet.

Damage to cash registers and cash drawers can be avoided if they are left open at the end of the school day and funds placed in a safe or vault. This precludes the forceful opening of empty cash drawers and diminishes the likelihood of expensive repairs.

There are many other, more sophisticated protective devices to safeguard school property. Such devices include infrared detection alarms which are activated by a person's presence in the vicinity, rubber floor mats which trigger an alarm by the weight of a man, and electric eye devices focused along or across corridors which trigger alarms when a beam of light is broken. It a watchman is employed, his quarters could contain a receiving monitor of the building communication system, so that he may maintain a listening watch of the entire building.

The most complex protective system may fail, however, unless the simplest is employed—a careful inspection of the school's interior when it is locked at the end of the day. During this inspection, closets, storerooms, washrooms, and other areas capable of hiding an intruder should be checked. It is much easier for a bold thief to gain entrance during the day when schools are open, than it is for him to find a way in at night. **End**

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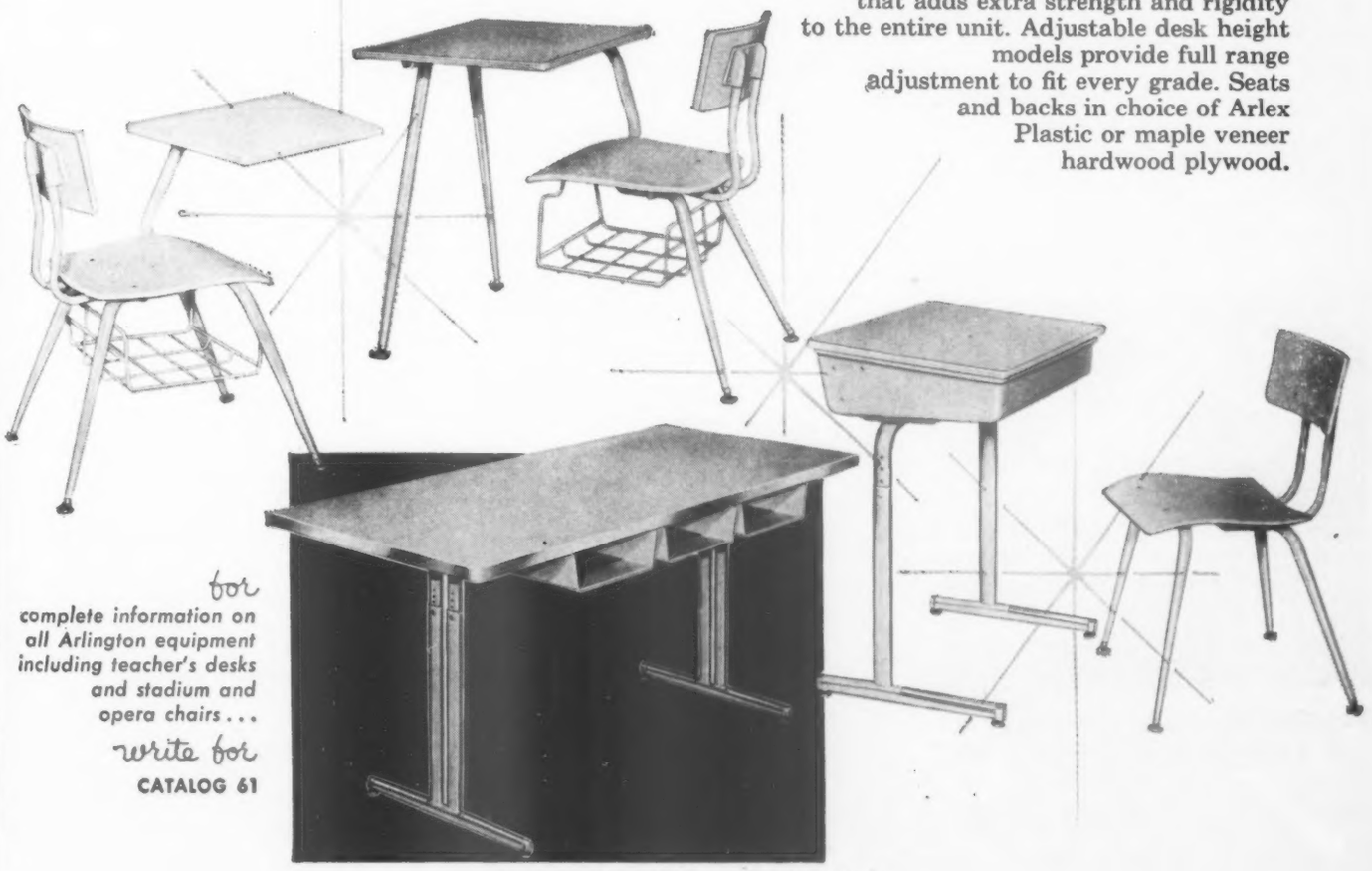
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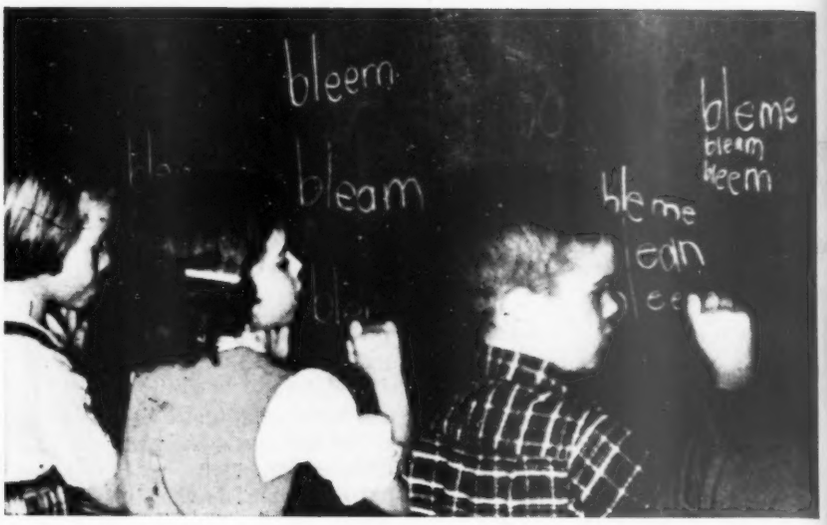


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(Circle number 737 for more information)

Children can read in kindergarten



In Carle Place, N. Y., schoolmen say that children are past the 'readiness' stage, and can be taught to read with phonics, before they enter the first grade.

By WILLIAM BACCI
Administrative Assistant
Carle Place, N. Y.



Reading and phonics are taught for only about 15 or 20 minutes a day.

■ ■ ■ The majority of my associates in elementary education feel that a child is much too young, when he enters the first grade, to do any actual reading. They argue that he needs "reading readiness" first.

At Carle Place, we believe that the children of this generation are prepared to read well before they enter school, and that they are past the stage of "readiness" when they begin their formal education. This would not have been true 15 years ago; but today, pre-school children are exposed to informal teaching through commercial television and reading materials bought by their parents in supermarkets. By the time they enter school, many of these children already can write the alphabet in upper-case letters.

Following through on this philosophy, we are teaching our children to read while they are in kindergarten, using the phonic method.

Our program is so successful, that by the time these kindergarten children reach the first grade, some of them are reading at the third-grade level. Those who are exceptionally advanced (about 10%) are given additional reading instruction, and after completion of the first grade they are reading at the fourth-grade level.

We began our kindergarten reading program about a year ago. We had two classes, one experimental and one controlled. After six months, we measured our results with standardized tests. The scores were so encouraging that we are now teaching reading in all eight kindergarten classes.

Once we decided to teach reading in kindergarten, we taught our teachers the phonic method of instruction. The teachers were shown how to make up stories which incorporated the principles of phonics, and one of our teachers made up some sketches to accompany the stories. We did not use commercial material, although it was available, because much of it was not suitable for our phonic program.

We had to convince teachers and parents, who were still believers in the old "readiness" program, of the value of teaching reading in kinder-

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(Circle number 793 for more information)

garten. Teachers changed their minds soon after the program began. Some told me that they now feel they are teaching academics, rather than merely teaching socializing, in the kindergarten.

As for parents, this was another matter. To convince them that teaching kindergarten reading was not only feasible, but advantageous, we made up a 30-minute film which showed the children as they progressed. Most scenes were taken right in the classrooms. Our audio-visual director made the film, and, although it was not up to professional standards, it convinced parents of the program's values.

We discouraged reading-at-home instruction by parents unless it tied in directly with the classwork. For example, if a child had been taught the sounds of the consonants "B," "C," and "D," in class, parents were asked to drill their children on this rather than progress to the next sound. By telling parents what we were trying to do, demonstrating the progress of their children, and showing how they could help (at PTA meetings and parent-teacher conferences), we received the full support of the community.

Some parents, in fact, have become over enthusiastic and tried to keep their children one jump ahead of the class. We had to ask these parents not to push their children because we are not interested in teaching kindergarteners to read a lot of meaningless words.

Reading is taught for only about 15 or 20 minutes a day. Motivating the children has been easy. They are fascinated by our audio-visual aids, such as tape recorders and overhead projectors. Pictures and sketches keep interest high.

All of our kindergarten children are being exposed to reading. If a child can't grasp the material, he is not pushed into it. We give him only as much as he can take. In the class, for example, a teacher will take her best "readers" and work with them on an advanced program. The other children will get a slower-paced phonic program. These slower children will get the actual reading program but at a slower pace in the first grade. They may be behind the advanced "readers," but they are far superior to those children who have no phonic exposure to reading in kindergarten. End

Is your district being deceived by 'protective' bid bonds?

By JOSEPH PHILLIPS
Assistant Superintendent
Nyack, N.Y.

Bid bonds and certified checks are intended to guarantee a district against nonexecution of a contract. In many cases, however, the deposit offers no protection at all. Here are some legal considerations.

■ ■ ■ When a school board advertises for bids, it requires each bid to be accompanied by either a certified check or a bid bond, equal to a percentage of the bid's amount.

This has been generally accepted as a guarantee that the bidder will execute the contract, if awarded.

In actual fact, the deposit is less of a guarantee than one might think. The most it guarantees is a reimbursing of losses due to the delay and cost involved, if the chosen bidder backs out of his proposal.

In many instances, the deposit offers no guarantee at all.

The option to include the "protection" clause requiring the deposit in bid notices has long been upheld by the courts. If a bidder does not win a contract, his certified check or bid bond is returned. So is that of the successful bidder if he enters the contract and furnishes a performance bond. (This, in turn, is protection against non-completion of the contract.)

But the only condition where the *bid deposit* may be retained is when the bidder has made an error in his calculations, apparently due to negligence or poor judgment. A case in point occurred in California, where a successful bidder refused to sign a contract, after he had been declared successful, because he knew he could not fulfill the contract. The city declared the deposit forfeited and the bidder sued for recovery. The court's ruling was that the bidder should not have bid, knowing he would not have been able to procure materials to assure the contract's completion.

When a district advertises for bids, it may specify that *either* a bid bond *or* a certified check accompany the bid. Most contractors prefer the bonds because they are inexpensive and easy to obtain. In addition, if any legal problems arise, the financial burden of defending the contractor is placed on the bonding company.

Generally, however, a school board can get greater protection if it requires a certified check. Here's why:

1. The chances of fraud are minimized. With a certified check, the board can be assured that the contractor has financial backing.

2. Any contractor can purchase a bid bond cheaply. Some bonding companies will cover a contractor even though he has not been investigated, because court decisions have made it nearly impossible for school boards to protect themselves against incompetent contractors.

3. Bid bonds will not protect the board unless the contractor refuses to enter into the contract because of his own negligence or poor judgment (or death in the case of an individually owned company).

Retaining the bond or check

In cases where the successful bidder has failed to enter into a contract, the most prevalent reason has been the discovery of a mistake in the bid. Under these circumstances, school boards and administrators would naturally assume that they are permitted to retain the deposit. This is not always the case. Following are some examples where the deposit had to be returned to the bidder:

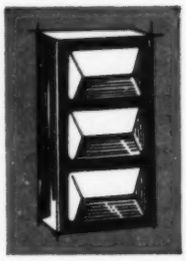
In a Michigan case, the court ruled that though a mistake was made in a bid, it was of a fundamental character and there was no gross negligence on the part of the successful bidder. Both parties "may still be placed in the status quo," and the bid deposit was to be returned.

In a Kentucky case, a mistake in the bid was not discovered until after the contract was signed. Although the contractor refused to perform, the deposit had to be returned. The court ruled that this

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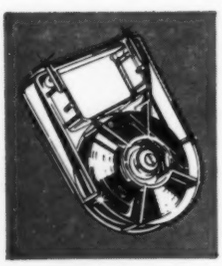
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was not "the contract contemplated by the parties." The contractor, however, was required to pay for re-advertising of bids to place both parties back in the status quo.

In Berkeley, Calif., Contractor James I. Barnes' mistake was obvious to the board when his bid was opened. It was, nevertheless, accepted. The court ruled that since the school board had actual knowledge of the error beforehand, it should not have taken advantage of the situation by accepting the faulty bid.

Withdrawal of bids

The general rule is that until a bid is accepted, the lowest bidder may withdraw without penalty even though it was the board's intention to accept his offer. Here are three cases bearing on the subject:

In a New York court, a contractor in this situation was ruled to have the right of unilateral abrogation of the contract. The board refused the bidder permission to withdraw, and prepared contracts in terms of the submitted bid. When the contractor secured an injunction, the board declared the deposit forfeited. The court overruled the board since the bidder had signified his intention to withdraw before the board had acted.

Even when a bid form stated, "Bidders will not be released on account of errors," a New York court ruled in favor of the contractor, stating that a proposal may be withdrawn at any time before acceptance.

A bid can also be withdrawn, without forfeiture of the deposit, if the school board alters the bid. In a case brought to the Supreme Court of Minnesota, a school board, notified of a mistake in the bid, had rectified the error. The bidder then had refused to sign his proposal with the changes, and the board attempted to retain the deposit. The court ruled in favor of the bidder.

Re-advertising for bids

Suppose the lowest bidder refuses to sign a contract because of a mistake? If the district re-advertises for bids, instead of accepting the second lowest bid, it *cannot* recover damages from the lowest bidder. This is true even if the lowest bidder on the second call exceeded the second lowest bid on the first. **End**



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Santa Fe

continued from page 81

Santa Fe, and not just the youngsters, will in the end pay the penalty."

Here are the main suggestions of the NEA committee—a blueprint for harmony:

Civic groups should participate fully in school activities. They should form a citizens' advisory committee. School board candidates should be nonpartisan and should be selected as such. Avoid rumors. Put criticism in writing. Accuser should face accused. State laws should be amended to move up the adoption date of school budgets.

The Santa Fe board should lead, not coerce; cooperate with teacher groups on salary and criteria revisions; revise its personnel policies; require all personnel to put official communications in writing, not accept hearsay, and hold board meetings so that teachers and the public can attend if they wish.

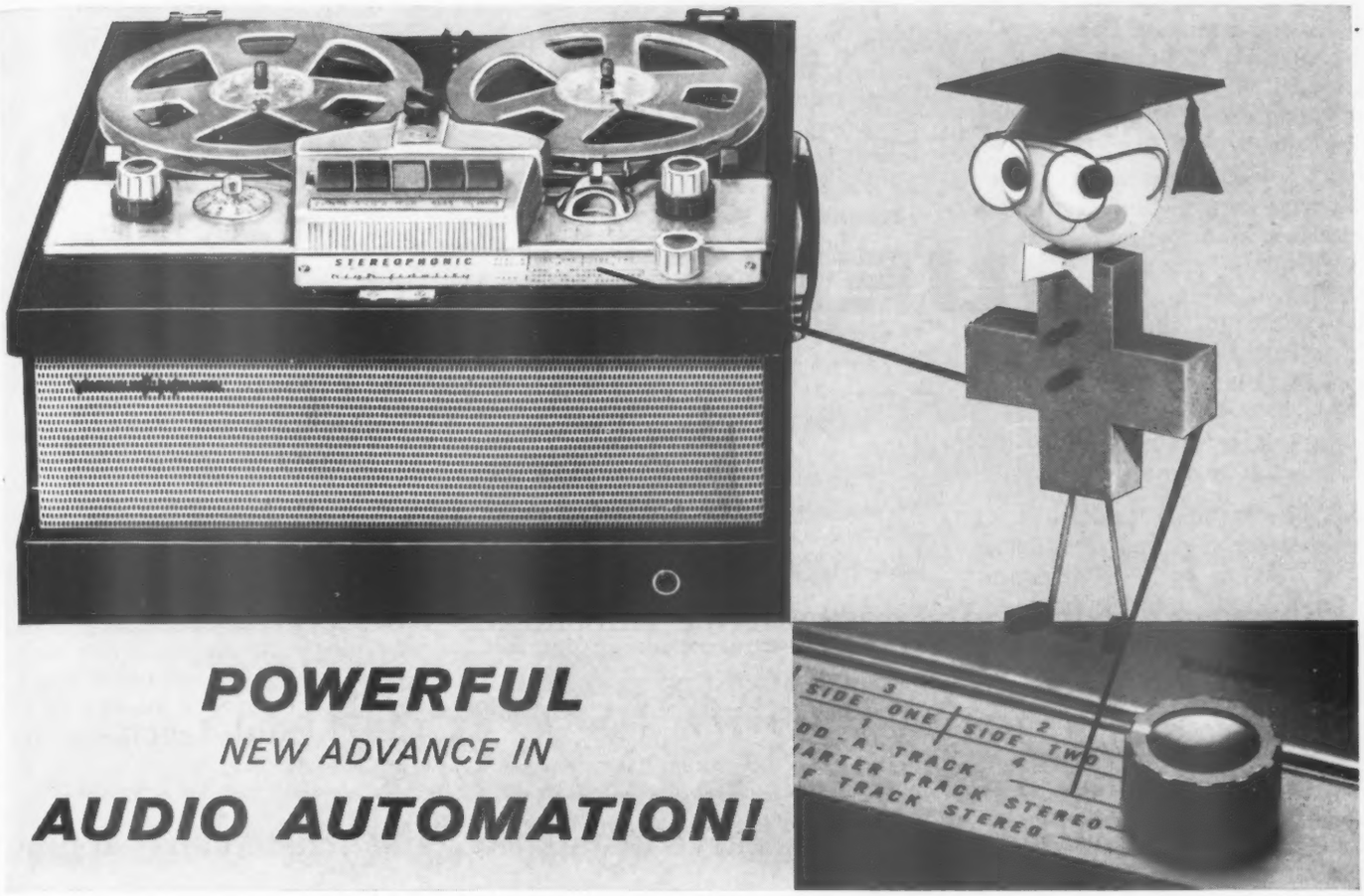
The superintendent should work with and through his staff and board. If he can't, he should resign. He should undertake a thorough study of the "merit-demerit" plan. He was told to stop blaming others constantly for all the trouble, and to work with the teachers' association. In a nutshell, he was called on to use "greater consideration and tact." The NEA committee said his actions did little, "if anything," to ease the situation but only seemed to make it worse. His handling of the "merit-demerit" contract was criticized as "a disservice to the board as well as to the teachers and the community."

Teachers were told to cooperate with the board and superintendent and his administration, to become more interested in their own organization, to attend board meetings, to set up a local ethics committee, and to maintain high standards of conduct.

And what now?

Have things changed much since the NEA Defense Commission hit the Santa Fe trail? Yes, but more can be done.

A month after the probe, the board set up a teacher salary schedule as a "guide" for the coming year, later agreed to trim its budget by $80,000. The superintendent even said he could lop off $150,000 in case tax collections fell. **End**



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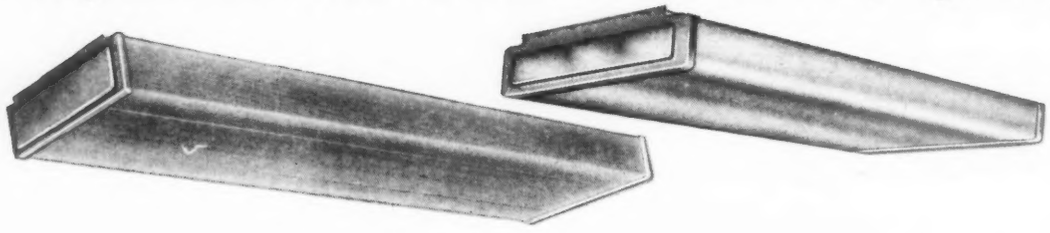
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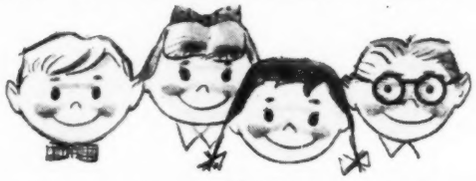
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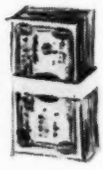


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he ask your secretary to include this on your agenda?

NEWCOMER: When I first started using this technique, I found myself going out with a prepared agenda. But the principal would start telling me about a problem that he had. He'd ask for my help for one of two reasons: because he really wanted it, or to go on the offensive to keep me from probing into the other aspects of his organization. So I found that I had to say, "This is my day. I ask the questions. When we get through, if there is time, I'll be happy to discuss any of your problems; but you must remember that I am always available to work with you on any problems that you raise at any given time."

Q. How many of these supervisory visits can you make during the year?

NEWCOMER: I would like to do one every two months, but I can't. I try to do four of them a year, but I come closer to hitting everybody three times. There are some principals who have been with us for some time, to whom I will make two visitations a year. To others, I'll make four. This might make people think, "If I get four, that means I'm not as good a principal as somebody else." That's too bad. This is one of the realities of life. Everybody gets two. New principals get approximately four and problem principals will get many.

Q Do you compare principals? That is, do you look at the school for itself or do you say, "This is not as good as the school I visited the day before"?

NEWCOMER: I doubt if anyone can keep from comparing to a certain extent, but I certainly would try to guard against it. I think our selection process has tended to bring to us some rather unique people with some rather unique strengths, and they operate differently. We have some principals who are highly successful because they really know how to work with people. They're not intellectual giants themselves but they bring out the finest in people. We have some principals who are highly skilled—intellectual giants I would call them—who really teach their staffs. Now both could be excellent. I think it's highly dangerous to come up with a standardization, because we'd push everybody to the mean.

Q. What are some of the other techniques you use in supervision of principals?

NEWCOMER: We ask for, and obtain, reports from the principals relative to many aspects of their operation—caseloads of the guidance counselors, the number of pupils at the fourth grade level who are a year below their aptitude as shown on standardized tests, etc. We keep the person looking at what he's doing. Another example. In January, I ask for a report on those teachers about whom there are doubts in regard to hiring for the next year. This doesn't mean that a principal has made the decision. What I'm really doing is saying, "I want to be sure you've looked at this question."

Q. You seem to put a great deal of emphasis on the management techniques of principals. Is that true?

NEWCOMER: Yes, we are concerned about the use of management techniques. This is not management of yard duty, scheduling, supplies, the budget, but management of the educational enterprise. I call it the pushbutton technique, where the principal can, by just asking for reports or getting certain kinds of information, actually be in control of his enterprise.

Q. How do you teach principals to use these management techniques?

NEWCOMER: We send our principals to workshops in and out of our district. We have a professional library that has a tremendous collection of management books. These are not on educational administration alone but cover all areas of management. I think we have shown that the only way to be a successful principal—and not to have

---

INTER-OFFICE MEMORANDUM

To: All principals
From: L. B. Newcomer
Re: Supervisory visit

My secretary will be contacting you in the near future to arrange for a supervisory visit at which time I will wish to observe, discuss, and/or evaluate the operation of your school in terms of some of the following:

1. *Your school's implementation of the SRA Reading Lab.*
2. *Your planning with and direction and supervision of guidance counselor, school nurse, and speech therapist.*
3. *Your management techniques used to insure that you have knowledge about your school operation in terms of balance and quality.*
4. *Your school's implementation of the district reading program.*
5. *Your school office environment and organization with particular emphasis on the discrete function of the school secretary and instructional aids clerk.*
6. *Your total school environment in terms of pupil standards of behavior and discipline.*
7. *Your school's implementation of programs of televised instruction.*
8. *Visit selected classrooms and observe samples of children's writing.*

If you seem to be having a serious problem related to organization of your time and energy to get the job done and wish to keep a two-week log of your activities prior to my visit, I will be happy to work with you in an attempt to analyze and develop suggestions for increasing the efficiency of your time commitment.



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ulcers—is to use good management techniques.

Q. Do you provide a secretary for each of your principals?

NEWCOMER: Every principal has a very well qualified secretary who must take dictation, be able to use dictating equipment, etc. We also provide a full-time instructional aids clerk. We used to have assistant principals, but we found that what they were doing could be handled better by a non-professional person who was paid less. The instructional aids clerk is a full-time employee who handles instructional materials and supplies, obtains film strips and instructional resources for the teachers, works almost as a teacher's aide but also is an aide to the principal.

Q. Do you hold any meetings with your principals as a group during the school year?

NEWCOMER: Yes. I meet with the principals twice a month. Any principal can put an item on the agenda and I prepare background material that goes out ahead of time. This is where we do our group discussion of problems, our decisions about things we wish to recommend to the administrative council for action.

Q. Who is involved in this?

NEWCOMER: All the principals and myself. Now this year, since we have an elementary school department and a secondary school department, the director is the person who meets with each group. I can sit in any time I wish.

Q. Do you do any in-service training work in these sessions?

NEWCOMER: Our director of curriculum services brings in displays, new instructional aids and resources and this kind of thing. We don't employ a general or special consultant in our district, but we do budget a pretty sizable amount for the use of outside resources and consultants for in-service training purposes.

Q Suppose during the year you identify a principal who has a problem. What do you do? How do you handle this situation?

NEWCOMER: It depends upon how serious the situation is. If I spot any-

thing that I think is quite significant, and I think is remediable, I go to work on it right away.

Q. How do you do something about it?

NEWCOMER: I particularly like the one-to-one approach. I've told each of the principals that the greatest respect that you can possibly pay any person with whom you work is to be completely honest. I try to be very, very frank and say: "This is an area, as I see it, in which if you improved you would be happier, your program would work better, and it looks to me like it's a possibility. Let's see what some of the possible things are you might do." This depends again on the person. With some people, you can mention a weakness and leave them free to select their means. Other people need, and expect, a little more direction.

Q. Would you later check them on these particular points?

NEWCOMER: Oh yes. Again, it's difficult to make a generalized statement because some of the people check back with you. Others, you need to check. If you find people deficient in such things as not getting reports in when they should and not following through on materials, then I don't think you mince any words. We're paying the same as middle management pays in industry for these jobs, and just don't put up with sloppy work.

Q. Suppose you decide a principal is not working out. How and when do you tell him this? Has he had an idea beforehand that you are not satisfied with his work?

NEWCOMER: We would never let a principal go until we had identified to him, in person and in writing, what we felt his weaknesses were. We give him ample time to correct those weaknesses. Then we have another assessment in which we decide whether he has corrected them sufficiently or not. I think you owe this to anyone. Remember, we supervise our principals closely, not to keep a check on them and to find fault, but to help them do a better job. No man is perfect and no man is an island unto himself. Supervision—good supervision—should be welcomed by any principal, especially one who knows he's doing a good job. **End**



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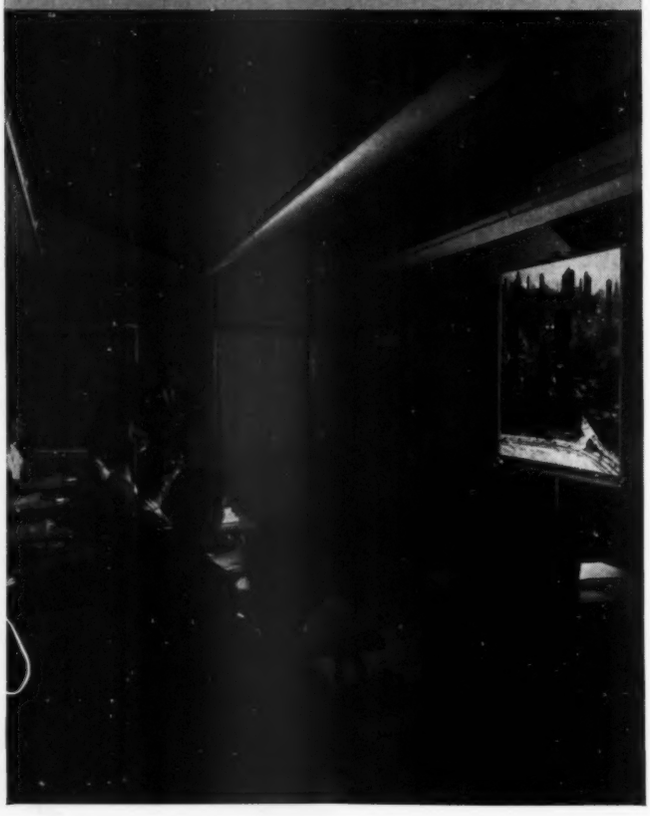
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HOW TO CONTROL LIGHT... TO LIGHT UP YOUNG MINDS

Two Washington schools with unusual window treatments use Joanna Room-Darkening shades to convert classrooms to audio-visual use.

As in many schools across the country, Glacier Senior High School, Seattle, and Seahurst Jr. High in Seahurst make extensive use of audio-visual teaching techniques. And with Joanna Western Room-Darkening Window Shades they quickly and easily convert classrooms to audio-visual rooms, thus saving time in travel between rooms, and money in building special rooms for showing films and slides. Each school has found both original cost and maintenance of Joanna Shades to be less than with other types of room-darkening window coverings.

Glacier and Seahurst are built on ground level with each classroom an individual unit. Students go from one room to another on outdoor covered walks, so it is even more desirable to eliminate unnecessary travel between classrooms here than in standard school buildings.

Both Glacier and Seahurst have unusual types of windows requiring very special shade installations, including triangular pull-up shades and skylight installations with shades pulling across for room darkening.

Whatever your school's light control needs, Joanna Western makes a specialized product to fit your requirements. Have your secretary mail the coupon for complete information.

Joanna Western

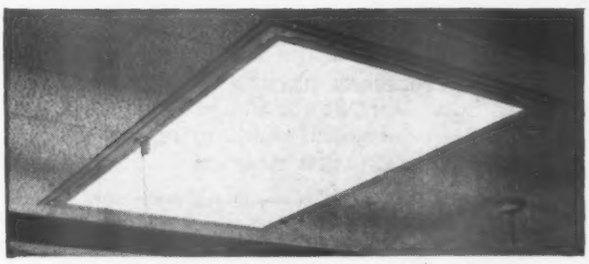
World's largest manufacturer of window shade products



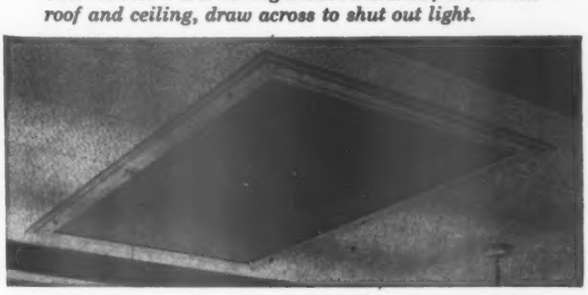
At Glacier three 8' x 10' windows along one side...



are equipped with Joanna Room-Darkening Window Shades.



Skylight bubbles provide additional light at Glacier. Joanna Room-Darkening shades installed flat between roof and ceiling, draw across to shut out light.



Mr. Bill Berry
Joanna Western Mills Co., Dept. C
22nd and Jefferson Streets
Chicago 16, Illinois

Please send me complete information on Joanna Western light control products. I understand there is no obligation.

Name_____

Title_____

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(Circle number 734 for more information)

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Their design permits more efficient, low-labor dishwashing, as many dishes as needed for serving up to 2500 people per meal. Five different types of conveyors are available to give the ideal combination of features for all requirements. Write for more information and your Blakeslee Dealer's name, today.



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continued from page 43

schools can be designed to meet a variety of site and functional requirements. Three basic junior high designs are illustrated. One is a compact structure for a level site, one is a "hillside" school and the other is a "pavilion" unit adaptable for a campus plan.

For a free copy of this booklet, circle number 838 on the Reader Service Card.

Furniture catalog. The Southeastern Metals Co. is distributing a catalog describing its line of ScholarCraft chairs, desks and tables. All furniture features tubular steel and hardwood, and some pieces have a plastic finish. At points where wood would come in contact with metal, separators of vinyl plastic act as shock absorbers and give added resilience.

For a free copy of this catalog, circle number 878 on the Reader Service Card.

Window draperies. Controlling solar heat, muffling sound, and diffusing light with fiberglass draperies is detailed in a booklet published by Fenestra Fabrics, Inc. There is also technical data on thermal efficiency co-efficients, light transmittance values, and noise reduction co-efficients. Maintenance costs are also detailed.

For a free copy, circle number 843 on the Reader Service Card.

Glazed masonry units. Details, features and advantages of glazed concrete masonry units are described in a 16-page brochure being distributed by the Burns & Russell Co. Colors and shapes are illustrated. Also available are reports of laboratory tests on the major physical and chemical properties of the masonry, and a folder of looseleaf sheets of drawings and construction descriptions.

For free copies of this material, circle number 818 on the Reader Service Card.

Improve data processing. The Syntron Co. is publishing a catalog which includes equipment to improve data processing. The business form "joggers" are used for the proper alignment of checks, punch cards, account cards, payroll cards, etc. The "joggers" are available in two-, three- and four-bin models.

For a free copy of this catalog, circle number 841 on the Reader Service Card.

SM | PRESS RELEASES

News from the business firms serving your schools

Synchronizes slides, tapes

The Voice of Music has announced a synchronizer which matches slide presentations with tape recordings. The synchronizer is compatible with most



popular brands of remote control slide or strip film projectors and tape recorders.

The synchronizer imposes a low pulse signal on the recording tape which, during playback, trips the projector.

Because there is no standardized control plug or receptacle among various projectors, the manufacturer will provide a cord to meet the purchaser's specific requirements.

For more information, circle number 826 on the Reader Service Card.

■ ■ ■

Sanitation spray

A sanitation spray made by Airkem Inc., cleans, disinfects, kills odors and leaves a residual air-freshened effect on sprayed areas.

The solution is being marketed in a non-breakable, six-ounce plastic container. The spray is said to be satisfactory for a surface which requires immediate, but non-routine, cleaning. It is sprayed on, then wiped off with a damp cloth.

For more information, circle number 863 on the Reader Service Card.

■ ■ ■

35mm rotary camera

A portable rotary camera made by Remington Rand uses 35mm film to photograph records up to 12 inches wide and any needed length. The camera features daylight loading, automatic feed, and visible film supply indicator. Warning signals indicate when the take-up spool is full, when film supply nears exhaustion or when the camera is improperly loaded.

A reduction ratio of 12:1 on the 35-mm film assures images of high resolution for electrostatic printing and enlargements.

The camera is equipped with a handle for convenience in transporting.

For more information, circle number 835 on the Reader Service Card.

■ ■ ■

Mobile language lab

Schools lacking sufficient space for permanent language lab installations are offered a mobile classroom, housed in a trailer, by Rheem Califone Corp. Available in 35-, 42-, and 55-foot lengths, the vehicle will accommodate from an 8- to a 27-station language laboratory. Fully air-conditioned and weatherproofed, the lab-on-wheels is designed for the teaching of foreign languages in rural areas, consolidated schools and in elementary schools where one such unit may serve a great number of students in one or several school buildings.

For more information, circle number 853 on the Reader Service Card.

■ ■ ■

Bus for wheelchair patients

Equipped with a side-loading ramp, this bus made by the Superior Coach Corp. is specially designed to transport wheelchair patients.

The self-storing ramp extends from the bus to the curb. It is mounted on nylon rollers, is lightweight, and can be handled by one man. The ramp,





New Way to Stop Faucet Leaks!

★ 9-in-10 washers are fastened with TOO LONG or SHORT SCREWS thus loosen and destroy themselves. Leaks quickly follow!

34 YEARS OF RESEARCH REVEALS NEW SOLUTION

★ New, patented 'Sexauer' SELF-LOCK screws have imbedded expanding NYLON PLUG. They lock at required depth AUTOMATICALLY, hold washers firmly! Made of MONEL, they are rustproof, non-corroding. Heads can't twist off. Screw slots can't distort.

★ NEW, improved 'Sexauer' EASY-TITE faucet washers are made of super-tough, pliable du Pont compound (not rubber or fibre). Reinforced, like a tire, with a vulcanized layer of Fiberglas, they resist distortion and splitting from shut-off grind and squeeze.

★ Faucet leaks repaired with 'Sexauer' EASY-TITE washers and SELF-LOCK screws outlast ordinary repairs "6-to-1"!

HIDDEN COSTS OF FAUCET LEAKS!

Hackensack, N.J. Water Co. and American Gas Association figures prove stopping just ONE PIN-HOLE SIZE (1/32") LEAK saves you 8,000 gal. water quarterly. A HOT WATER FAUCET LEAK repair saves you over $7.58 QUARTERLY in fuel and water bills. Fewer leaks also produce important savings on MATERIALS, LABOR and COSTLY FIXTURE REPLACEMENTS!

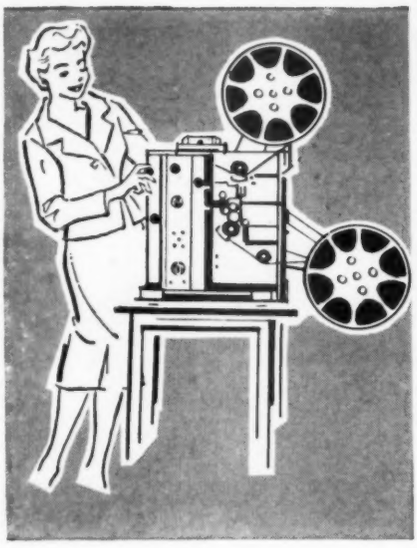
A 'Sexauer' Technician will make available our NEW Catalog, Edition "J", listing our entire line of over 3,000 TRIPLE-WEAR plumbing repair parts and tools. He will survey your fixtures, determine the repair parts needed and establish an efficient stock arrangement and control to prevent costly overstocking or shortages. You get this service without obligation. *Act now!*

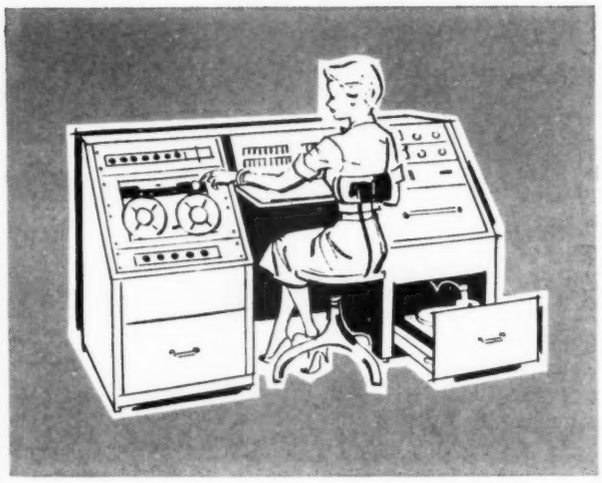


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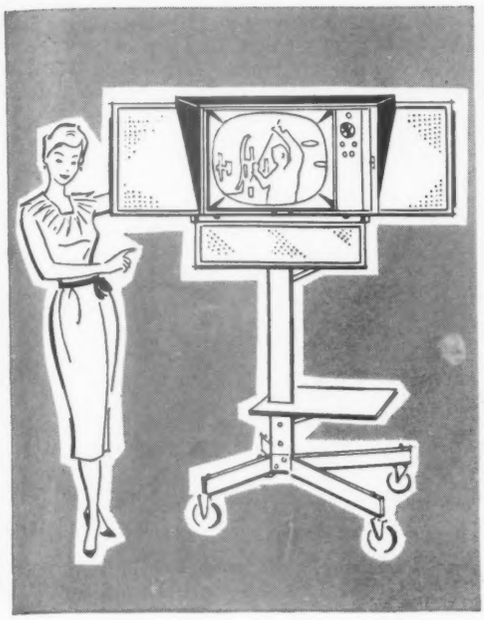
RCA electronic tools Today's second-best

Why second best? Because RCA electronic tools for education were designed to serve what is indisputably the best investment any school can make—teachers. And to serve them well. Here are the tools that provide magnificent sound and brilliant visuals to quicken the student's interest, help him to learn faster and retain more; provide new techniques which enable the teacher to devote more time to individual students and reduce the drudgery of classroom drill.

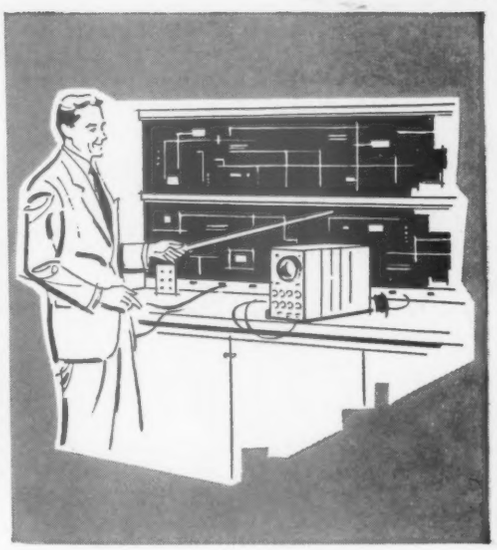
RCA is a second best of long standing. No electronics-come-lately to the educational field, RCA has been making 16mm sound projectors for thirty years and school sound systems for more years than that. This long association with the school market has resulted in an extensive line of products specifically designed to meet this market's unique needs. For example, every product in the line features ease of operation and ruggedness of construction. With RCA Electronic Tools for education you get equipment whose simplicity encourages use; equipment that will withstand the onslaughts of even the most spirited students, and will give you on-schedule performance in class after class.

The modular construction of both language laboratory equipment and sound systems is another evidence of RCA's awareness of school needs. These products were engineered for growing schools. You buy to meet your present needs only; expand when you need to. But, like the extra length in junior's trousers, the expansion is planned for. Thoughtful design permits the installation of additional equipment in short time and at a low cost.

Similar instances of attention to the details that count in superior performance and operation can be seen in every product in the RCA line. RCA's 16mm "Life-Tested" Projectors are easiest to thread, feature single-switch control and lowest maintenance cost. RCA's Electronic Trainer offers a better method for teaching the theory and practice







for education. school investment

of electronics through a circuit by circuit demonstration of familiar electronic components. RCA's Preceptor Language Laboratory is transistorized for safety and extra reliability, features two-switch control for each student in the laboratory. RCA tape recorders and record players are light weight and rugged, have simple, sure controls and produce quality sound. RCA's modular sound systems use standardized components, give you the opportunity to choose the exact sound functions you want and afford custom assembly at bargain prices. RCA's Lyceum Television Receiver delivers a clear picture even in fringe areas, features a tilt mechanism and anti-glare shield for improved viewing, can be completely locked for safety when not in use.

Above all, each of these products is composed of components of the finest quality, your assurance of first-rate performances in class after class.

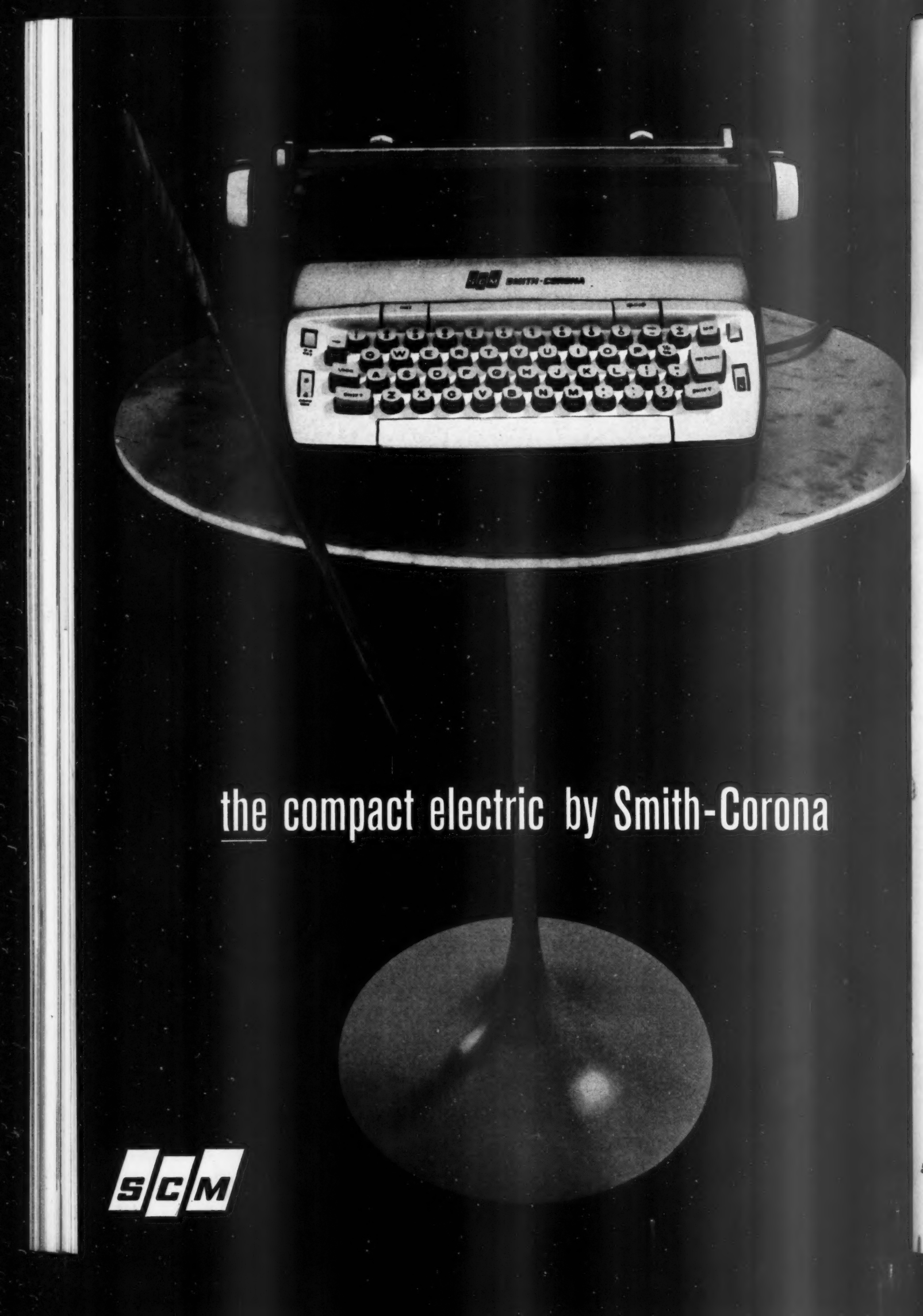
For detailed information on any or all of the RCA Electronic Tools for Education, please write RCA Educational Electronic Products, Radio Corporation of America, Building 15-1, Camden, New Jersey.

RCA®

The Most Trusted Name in Electronics

RADIO CORPORATION OF AMERICA

(Circle number 785 for more information)


the compact electric by Smith-Corona
SCM

constructed of aluminum, has safety edges on both sides, tread plates on its surface.

For more information, circle number 824 on the Reader Service Card.

■ ■ ■

Kit for science teachers

Elementary teachers without backgrounds in science can conduct interesting experiments with this kit by the Beckley-Cardy Co. It enables teachers to explain how sound is made and how it travels.

The sound kit contains complete equipment for 15 demonstrations, each of which is illustrated. There is also a comprehensive manual with step-by-step instructions. The kit is approved for purchase with NDEA funds.

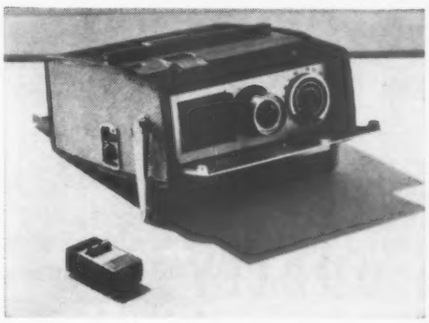
For more information, circle number 827 on the Reader Service Card.

■ ■ ■

Sound-operated projector

The Bell & Howell Co. is introducing a slide projector which uses sound waves to focus and change slides. The controls can be operated remotely with a pocket-sized unit.

The control unit has two miniature transmitters which send high frequency waves to a receiver on the projector. The remote control is effective from a distance of about 40 feet. The transistorized projector is lightweight, portable and shock-resistant.



For more information, circle number 831 on the Reader Service Card.

■ ■ ■

Fire detection alarm

A fire and smoke detection alarm system by Pyrotronics, a division of Baker Industries, Inc., employs an ionization-type detector to give advanced warnings of fire conditions. The system claims to detect the invisible products of combustion which are the first indication of fire. A battery power supply covers the alarm in case of electric failure. The device can be installed in normally hot or cold areas, and can be used in con-



A teachable office **electric** at the price of a **manual.**

Never before has there been a teaching typewriter like the new Smith-Corona Compact 200. Never before a true office electric at the price of a manual!

The Smith-Corona Compact 200 is a full-featured electric office typewriter. Yet it's **compact** . . . just half the bulk of conventional electrics. In one compact package you get a teaching tool with a full-sized electric keyboard . . . full-sized carriage with automatic return . . . automatic repeats. Here is everything you need to teach electric typing effectively and easily. No discipline hazards. No frills. It's simplified!

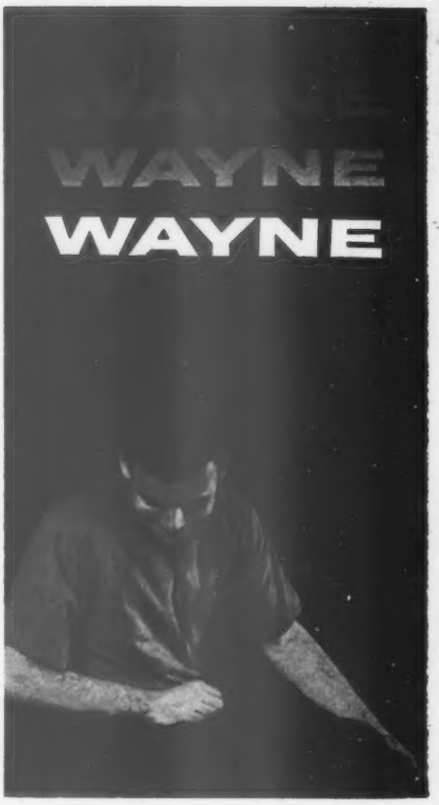
Of course, it's important today to teach **electric** typing, because modern business calls for typists familiar with electric machines. And in school or out, there is no electric typewriter more economical, more efficient than the new Smith-Corona Compact 200.

See this new kind of teaching typewriter at work in your classroom. Just contact your Smith-Corona representative for a demonstration. And ask about the complete portfolio of teaching aids available without obligation.

SCM

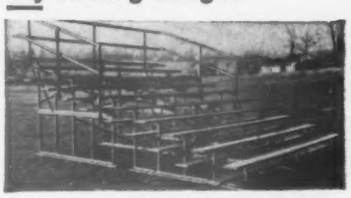
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Wayne Type "L" Portable Steel Bleachers. More safety, seating, savings on cramped budgets.



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Whatever the scope of your seating needs, whatever the size of your budget, Wayne can provide a system that gives more efficient seating . . . at greater savings. For when you call Wayne you draw on the experience of the world's largest manufacturer of spectator seating.

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nection with ventilating and air conditioning systems. The entire arrangement is said to draw no more current than a 25-watt light bulb.

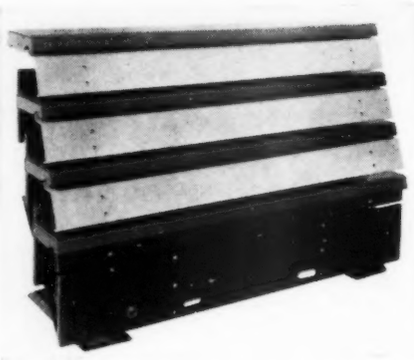
For more information, circle number 891 on the Reader Service Card.

■ ■ ■

Folding gym bleachers

Folding gymnasium seating now being marketed by the Brunswick Corp. features vinyl-coated steel, thus capitalizing upon the durability of steel as well as the comfort, color and texture advantages of vinyl.

This type of manufacture is said to



deaden noises, is resistant to scratches, abrasion, burns and stains, and can be cleaned easily with ordinary detergents.

One safety feature of these folding bleachers is a slope front, which will break the falls of athletes before they make contact with the seating.

For more information, circle number 858 on the Reader Service Card.

■ ■ ■

Napkin wall receptacle

A heavy-gauge steel sanitary napkin receptacle for easy wall installation has been introduced by the John Wood Co. A self-closing top door, and swing-front for removing the waxed liner bags are other features. The receptacle is available in stainless steel or colored baked enamel finish.

For more information, circle number 861 on the Reader Service Card.

■ ■ ■

Hydraulic drafting table

Here's a drafting table which is operated on the same principle as a barber's chair. Its single pedestal is hydraulically operated and can pivot a full 360 degrees.

Manufactured by Isis, Inc., the table has a vertical traverse of almost



two feet, and the angle can be adjusted from vertical to horizontal. The working surface measures 40 inches by 60 inches and the entire apparatus is stable without floor attachments.

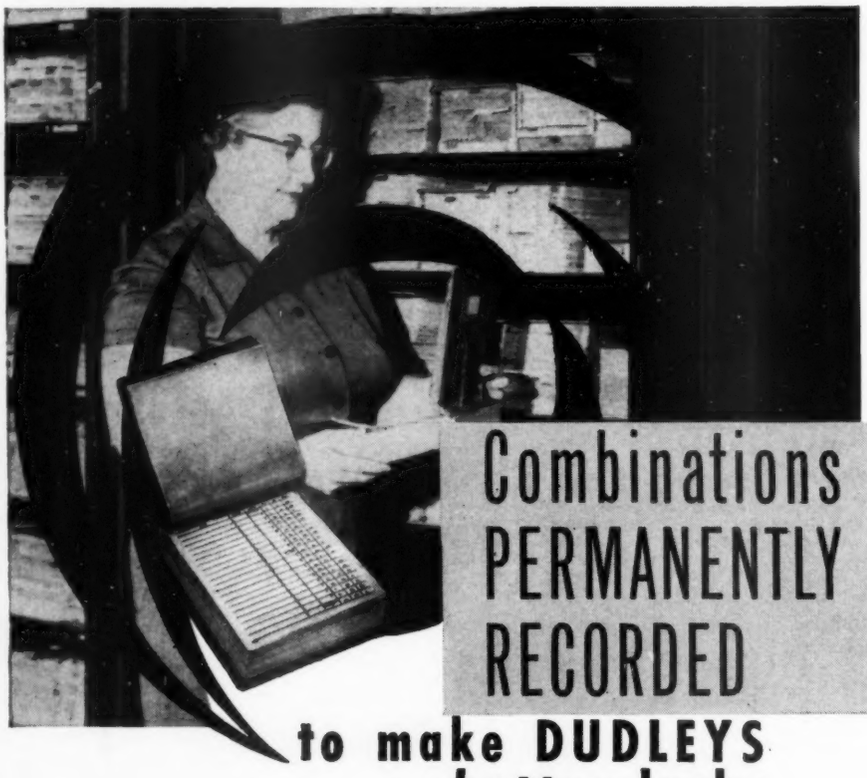
For more information, circle number 822 on the Reader Service Card.

■ ■ ■

Fire alarm

Designed for univeral use with non-code fire alarm systems, this signaling unit is easily operated with a single motion. Pulling a lever activates the alarm. It locks in the "alarm" position until reset by an authorized person.

The unit is constructed of die-cast aluminum painted red and white. It



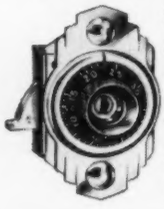
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Permanent usefulness is an outstanding feature of Dudley Locks—not only in principle and construction, but in the permanent record of opening combinations.

Dudley Locker Lock combinations are quickly available from records kept for a quarter-century at Dudley headquarters. Lost numbers can be supplied quickly and easily to any authorized person.

This permanent combination record service is only one of the many reasons why Dudleys have been favorites among school people everywhere for more than 40 years.



S-540
Master-Keyed Built-in Lock

Rust-resistant case with anodized aluminum escutcheon plate, fits all locker piercings. For right or left hand doors.



P-570
Master-Keyed Combination Padlock

Finest of all master-keyed padlocks. Cast aluminum case, extra heavy steel shackle. Self-locking. Rotating dial.

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The standard of controlled locker protection since 1921

(Circle number 716 for more information)

The Reading Laboratory, Inc.'s **DR*** Summer Workshop Equips You as a Developmental Reading Instructor

Designed to train educators in the fundamentals of Developmental Reading, Workshops will be conducted in twenty major cities across the country during July and August. Trained counselors offer insights gained through their own experience and that of The Reading Laboratory Inc.'s ten years of research and actual classroom work.

Completion of the three day (21 hour) program of concentrated, practical training, will enable participants to initiate and conduct successful DR Programs in their schools. A year-long consulting service is provided all participants.

Participants will be supplied in advance with selected course materials. Each workshop is limited to sixteen participants to insure personalized instruction and liaison with the counselors.

Topics covered in workshop include: use of mechanical aids, lesson planning, physical requirements, materials, reading problems, testing, establishing reading levels, typical student progress, scheduling of timed readings, and others.

Workshop Cities:

New York, Chicago, Boston, Philadelphia, San Francisco, Los Angeles, Detroit, Washington, D. C., Pittsburgh, Cleveland, Baltimore, Buffalo, Hartford, Twin Cities, St. Louis, Milwaukee, Dallas-Ft. Worth, Atlanta, Denver, Cincinnatti, Groups of sixteen in other locations at no extra cost.

Registration fee: $60.00

Special Workshop offer

A special $10.00 discount will be given to all workshop participants who purchase a **DR*** SKILL FILE. Purchase may be made at any time during the year.



DR SKILL FILE
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For full information write:

*__DR:__ *Developmental Reading, a course in advanced reading and study skills for all non-remedial students.*

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You'll find that Royal's school furniture helps students live and learn at ease! Individual comfort and convenience are built right into every Royal piece for every purpose—classroom and cafeteria, dormitory and office, laboratory and lounge. • Royal school furniture brings you lasting durability, modern appearance, and real economy. These are the reasons why Royal is so swiftly becoming the fourth R in so many schools today! For free literature and the name of your Royal dealer, send coupon below. ROYAL METAL MANUFACTURING COMPANY, One Park Avenue, New York 16, N. Y. In Canada—Galt, Ontario. SHOWROOMS: New York, Chicago, Los Angeles, San Francisco, Seattle; Galt, Ontario.

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SCHOOL FURNITURE



can be either surface- or flush-mounted and will accept a three-quarter inch conduit. This is a small, emergency signaling station designed for interior use.

For more information, circle number 823 on the Reader Service Card.

■ ■ ■

Controlled milk dispenser

An automatic portion control mechanism is available on a milk dispenser by Norris Dispensers, Inc. A platform scale is manually set to dispense any desired amount up to one quart.

A push button on the front actuates an electric device which pours milk into a glass, and a valve automatically shuts off when the correct amount has been dispensed. The machine is equipped with a temperature indicator on the door.

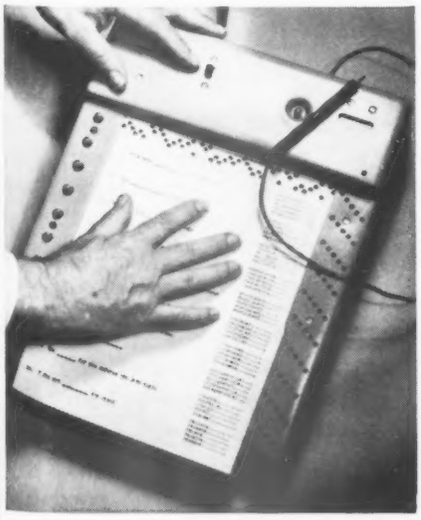
For more information, circle number 900 on the Reader Service Card.

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Helps students drill

The Astra Corp. has introduced a teaching machine designed particularly for drilling students in material which the teacher has already presented.

The teaching aid, working on the multiple-choice principle, has two digital counters. One indicates elapsed time and the other indicates mistakes.



The machine is a semi-automatic device, electrically operated.

For more information, circle number 830 on the Reader Service Card.

■ ■ ■

School communications

The DuKane Corp. has introduced a line of compact school communications systems. Each particular model provides: executive two-way communication; audio educational facilities for all classes, utilizing an AM-FM radio tuner or a four-speed record player; and an all-call service for emergencies.

Facilities are also provided for distributing program material from an external tape recorder, any of several microphones in different locations, or other auxiliary sources.

Each system can be expanded to as many as 48 rooms.

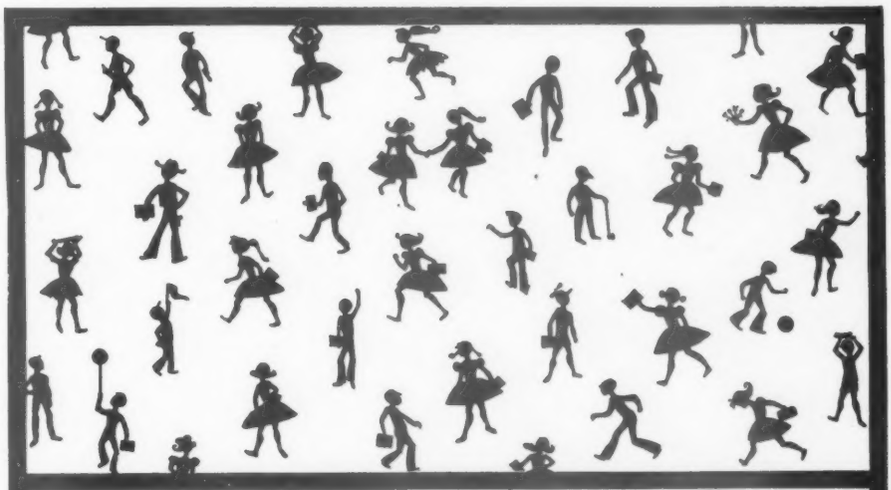
For more information, circle number 820 on the Reader Service Card.

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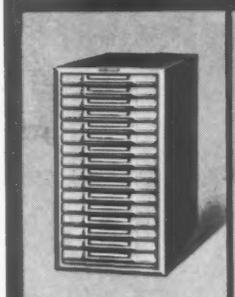
Kit for faucet seats

A kit produced by the J. A. Sexauer Mfg. Co. includes 35 different types and sizes of faucet seats with

text continued on page 148



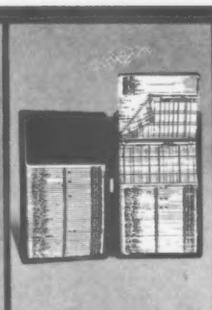
Acme Visible School Record Systems
SIMPLIFY RECORD HANDLING TO KEEP PACE WITH RECORD ENROLLMENTS



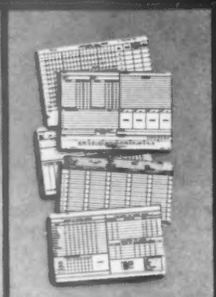
ACME TRAY CABINETS
Versatile file controls individual pupil records.



COMPACT CLASS RECORDS
A complete class record at a flip of the finger.



CLASS RECORD CARD BOOKS
Grades, enrollment, vital statistics at a glance.



PRE-PRINTED RECORD CARDS
Easy to read cards for all school records and needs.

Turn paperwork . . . teacher's pet peeve, into teacher's pet! Simplify all your record handling problems simply by using Acme Visible School Records and Systems.

For instance, now on just one Acme Visible record card, a student's complete school record! Background, grades, test results, even attendance . . . available at a glance. No need for a half-dozen different cards requiring duplication of entries and a waste of teaching time.

Similar Acme Visible records simplify handling of teachers' records, payroll, purchasing and inventory, maintenance and service. These time and work saving records can help your school. Call your Acme Visible representative or mail coupon. There's no obligation.

ACME VISIBLE

World's Largest Exclusive Makers of Visible Record Systems
ACME VISIBLE RECORDS, Inc.
6305 West Allview Drive, Crozet, Va.
Give me information on "Record Systems for Schools."

Name_____
Title_____
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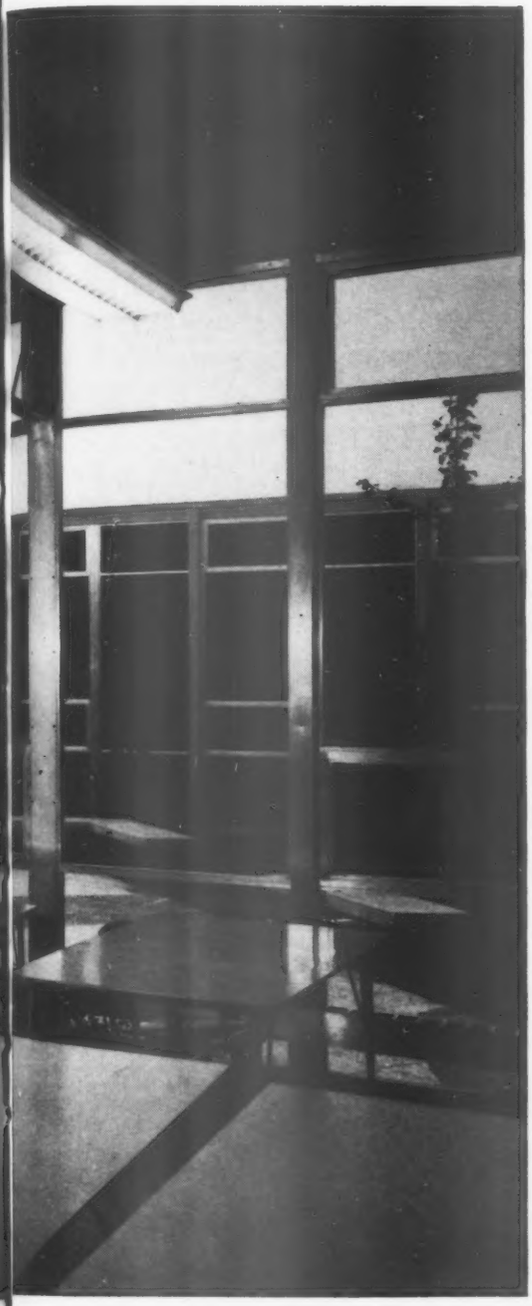
Plenty of Pittsburgh Polished Plate Glass means more natural light, less eyestrain for Finneytown High pupils.

This school was designed with eyesight

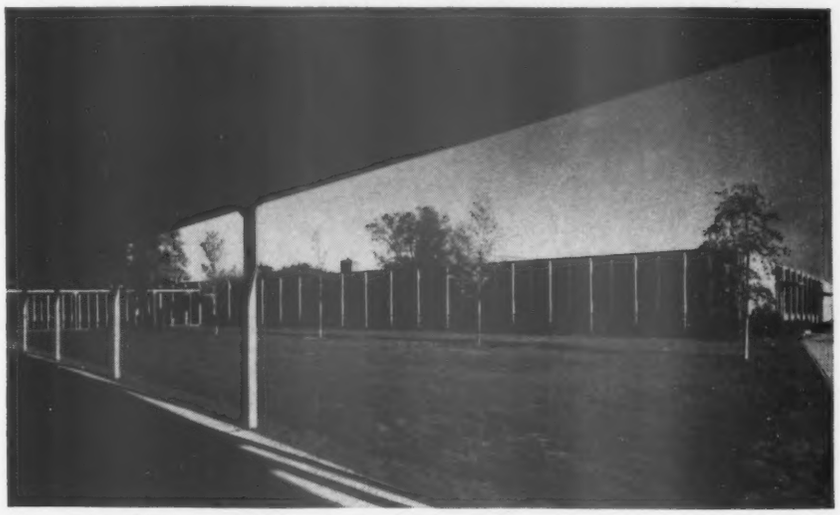
Wherever you look around the Finneytown High School in Finneytown, Ohio, there's glass—PPG Glass that lets in *plenty* of natural light, adds an extra measure of beauty to the buildings, and provides an ideal learning environment.

Two PPG Glass products play a big part in making this school the bright, spacious place that it is: Pittsburgh Polished Plate Glass and PENNVERNON® GRAYLITE™ 14 Glass. Polished Plate Glass is used in areas that demand maximum light transmission where natural light is essential. PENNVERNON GRAYLITE is used where glare is a problem. GRAYLITE 14 is heat-absorbing glass that has a pleasing neutral shade which is undetectable to occupants, does not change outdoor colors, yet substantially reduces glare that can be so hard on the eyes. It helps keep the school cooler and more comfortable in warm months, too.

Inside and out, this is a modern, attractive school building . . . as beautiful as it is functional . . . thanks to glass from PPG. For more information on PPG products, write Pittsburgh Plate Glass Company, Room 1162, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.

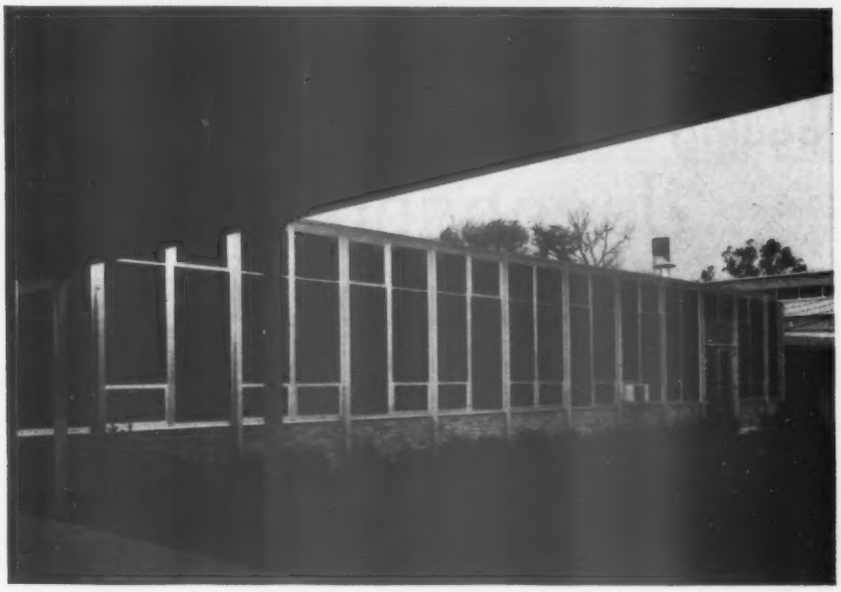


Finneytown High School, Finneytown, Ohio
Architect: Woodie Garber & Associates, Cincinnati, Ohio
Contractor: Holt & Reichard, Norwood, Ohio



Pittsburgh Plate Glass products enhance the appearance and help make the Finneytown school a pleasant place to attend.

PENNVERNON GRAYLITE 14 reduces the sun's glare and helps make this school a cooler and more comfortable building during the warm months.



in mind...with Glass from PPG

PPG Glass products for schools:

SOLEX® Plate Glass—green tint, heat-absorbing, glare-reducing glass
SOLARGRAY® Plate Glass—a neutral gray, heat-absorbing, glare-reducing glass
PENNVERNON® GRAYLITE™—a neutral gray, heat-absorbing, glare-reducing, heavy sheet glass
HERCULITE®—shock-resisting tempered plate glass
TWINDOW®—the world's finest insulating window
Polished Plate Glass—for clear, true vision
PENNVERNON® Window Glass—window glass at its best

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(Circle number 795 for more information)



Cut the cost of cutting grass with

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Mow more area faster and have a smoother, finer looking lawn with the new 76 inch Turf King. The three articulated, power driven reels operate *ahead* of all wheels, following ground contours, leaving no unsightly ridges. Wing units are retractable for close quarter mowing, will cut at 25 degree angle, up or down. Heavy duty construction means low maintenance, long operating life. Let us arrange a free demonstration by your nearby Jacobsen Dealer and Service Specialist. Send coupon today.

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☐ Arrange a demonstration—no obligation.

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Deodoroma ROUNDS cost in use averages only a *fraction* of one cent a day. Rounds are formed under 70,000 pounds pressure: are dense and durable. Fragrance is locked in: lasts until the last particle has vaporized—there's no harsh "moth cake odor." Packed eight to the telescoping box—each Round sealed airtight—easy-to-shape Holzit wire holder in every box. For literature write to The C. B. Dolge Company, Westport, Conn.

For free sanitary survey of your premises ask your Dolge service man

Dependable DOLGE
WESTPORT, CONNECTICUT

(Circle number 715 for more information)

which maintenance men can replace those which are worn, pitted or corroded.

The kit also includes three different sizes of wrenches for removing old seats, and a gauge with 33 tappings for determining the exact type and size of seat needed. Everything is contained in an all-metal carrying case.

For more information, circle number 870 on the Reader Service Card.

■ ■ ■

School supply dispenser

The School Supply Service Co. is now marketing a self-service dispenser for basic classroom items such as notebook paper, pencils and ballpoint



pens. The coin-operated machine is 53 inches high by 27½ inches wide and has been ruggedly assembled to withstand abuse.

The machine is a floor model, mounted on a storage cabinet containing supplies for restocking.

For more information, circle number 856 on the Reader Service Card.

■ ■ ■

Ink pad applicator

A "roll on" applicator for inking stamp pads has been developed by Printing Ink Products Corp. The refillable containers are made of heavy plastic and contain two ounces of ink each. Colors: red, black, blue, green and purple. Bulk quantities of inks are available.

For more information, circle number 876 on the Reader Service Card.

■ ■ ■

All-steel bookcase

A six-foot bookcase announced by Grade-Aid Corp. comes with a choice of five adjustable book shelves or four book shelves and a tilted magazine shelf. All shelves can be moved up or down on one-inch centers to accommodate different size volumes. Extra magazine shelves may be specified in place of the book shelves.

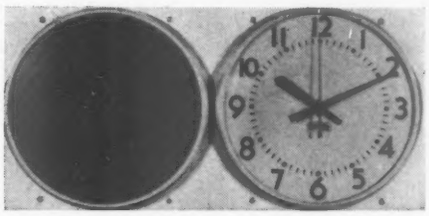
The bookcase, which measures 11 inches deep, is available in 36-inch and 48-inch widths. It can be set against a wall, left free standing, placed back to back or used as a room divider. Available in tan or gray enamel, the unit is made of heavy 20-gauge furniture steel.

For more information, circle number 857 on the Reader Service Card.

■ ■ ■

Clock-speaker combination

A combination clock and speaker, for use with public address systems, is mounted on a common panel and furnished with either round or square dial



components. Manufactured by Standard Electric Time Co., the combination is also engineered for integration with centrally controlled time and signal systems.

For more information, circle number 859 on the Reader Service Card.

■ ■ ■

Line marking compound

A non-irritating marking compound for football fields, baseball diamonds, tracks and other playing areas consists of finely powdered crystalline marble. Made by Mid-West Materials Co., the compound is said to be harmless to eyes.

Packaged in 50-pound bags, it is moisture proof for free flow and long storage.

For more information, circle number 884 on the Reader Service Card.

■ ■ ■

Efficiency building

An economical efficiency building which can be used as workshop, garage, equipment storage, or utility classroom, has been developed by the Martin Steel Co. Fireproof and weathertight, the building has a combina-

Better looking schools at lower cost

New 20 page booklet shows how schools can save two ways with American Olean ceramic tile.

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(Circle number 796 for more information)


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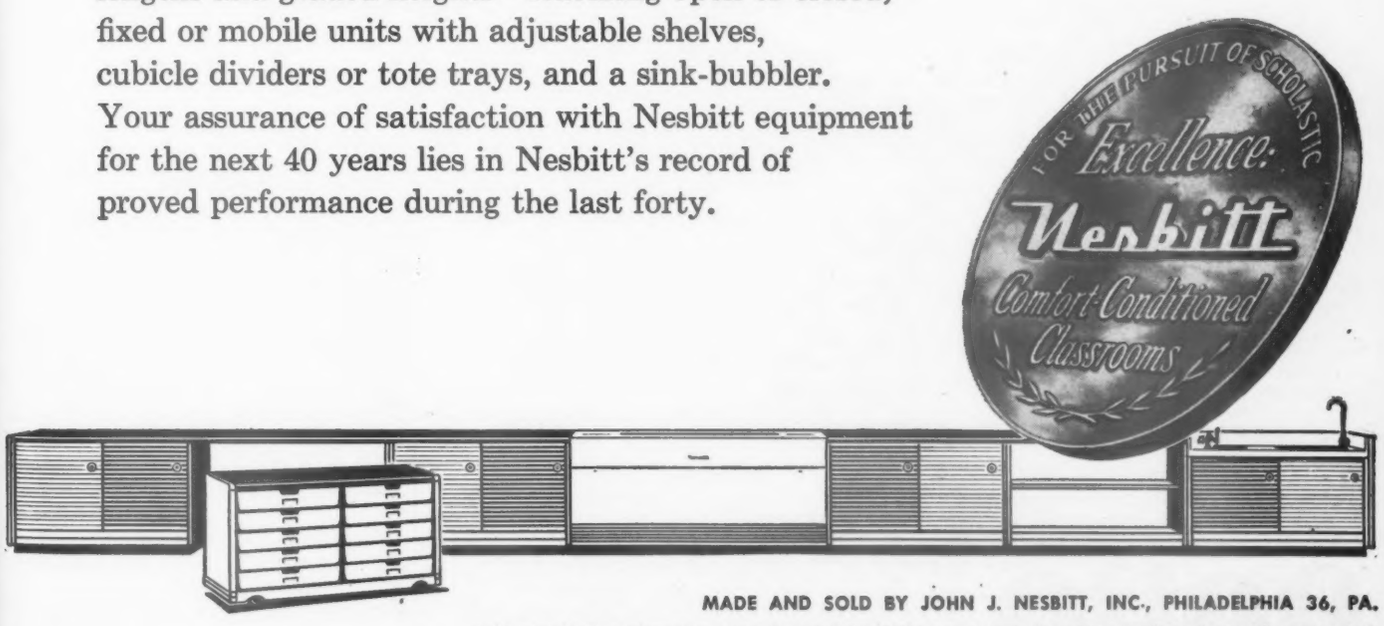
One investment in the Nesbitt 600 Line gives you the thermal comfort and the flexible storage facilities needed for active learning in the classroom

the cost of learning

Teaching is judged today, more than ever before, in terms of learning production and cost-per-pupil. Pupils who *participate* learn more; and a controlled thermal environment in the individual classrooms promotes pupil readiness and learning efficiency. Schools built for the next 40 years will include, as basic equipment, the mechanical means for heating, ventilating, and natural-air cooling—and when the outdoor air will get too warm for natural cooling, mechanical cooling and dehumidifying will be added. Flexible utility cabinets—teaching tools that encourage pupil participation—will also be required. To match both these needs—for comfort and utility—Nesbitt offers the colorful 600 Line, a window-wall ensemble that includes a Syncretizer (for normal school terms or year-round use), Wind-o-line radiation if required, and versatile storage cabinets in various lengths and graded heights—featuring open or closed, fixed or mobile units with adjustable shelves, cubicle dividers or tote trays, and a sink-bubbler. Your assurance of satisfaction with Nesbitt equipment for the next 40 years lies in Nesbitt's record of proved performance during the last forty.

Consider carefully the design of your new school building

By wise planning for the ultimate use of year-round air conditioning, it is often possible to save enough on construction and eventual operating costs to assure a completely air-conditioned school for no more than the cost of one with heating, ventilating and natural-air cooling. Talk with a Nesbitt representative, or send for Publication SP-1060.



MADE AND SOLD BY JOHN J. NESBITT, INC., PHILADELPHIA 36, PA.
Sold also by American Standard Industrial Division, and American Standard Products (Canada) Ltd.

(Circle number 799 for more information)

tion of sliding or walk-in doors, skylights, windows and ventilators. Adjustable steel columns and high-strength rib sheeting are other features.

For more information, circle number 892 on the Reader Service Card.

■ ■ ■

Mobile cafeteria equipment

Transporters designed to handle both hot and cold food will make associated cafeteria equipment mobile and ready for service in five minutes. The equipment comes with a plain top unit for cashier service or for bread and cake, a refrigerated milk dispenser, a tray assembly stand and a tray slide. S. Blickman is the manufacturer.

Brilliant colors are featured: among them are flamingo, turquoise, yellow and lavender.

For more information, circle number 834 on the Reader Service Card.

■ ■ ■

Television projector

Projecting a 9- by 12-foot picture on a movie screen or wall, a portable television receiver, manufactured by Dalto Electronics, tunes and receives signals much as an ordinary television.

The receiver-projector is completely self-contained, and features high fidelity audio. It can be used with ordinary antennas and operates on standard electrical current. If desired, the projection head may be separated from the tuning control and set up in another location.

The entire unit weighs 95 pounds.

For more information, circle number 895 on the Reader Service Card.

■ ■ ■

Versatile room conditioner

An air conditioner with individual room controls, for use in schools with central hydronic cooling and heating systems, can be installed in either floor or ceiling mounts and is available in concealed, recessed or cabinet models. Bohn Aluminum & Brass Corp. is the manufacturer.

The conditioner has removable filters and motor-fan assemblies, three-speed controls, and easily accessible piping and electrical lines.

For more information, circle number 893 on the Reader Service Card.

■ ■ ■

Keeps foods moist

Dried-out foods and shrinkage are said to be minimized in this refrigerator manufactured by the Victory Metal Mfg. Corp. The refrigerator features controlled humidity, and uniform temperature and air distribution throughout.

Pullout accessories are said to make about 50% more storage space available in each model of the line. The pullout accessories include shelves, sliding pans, meat rails and drawers.

The refrigerators are available with half or full-length doors in one, two, three or four sections.

For more information, circle number 828 on the Reader Service Card.



better look again . . .



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Think folding bench-table seating is pretty much "six of one and half-dozen of another?" SICO can prove it isn't so! There *is* a big difference in seating, and if you are really serious about getting full dollar value, better take a long look at that table you're thinking of buying. Then remember these six (of many) *extra features* found in SICO'S BY-65—features which no other table in the world can match:

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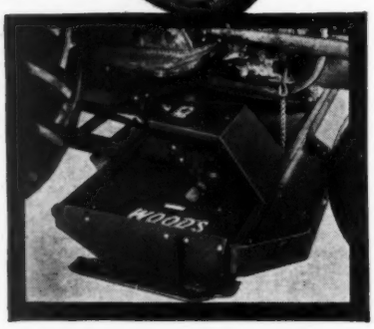
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700	701	702	703	704	705	706	707	708	709	710	711
712	713	714	715	716	717	718	719	720	721	722	723
724	725	726	727	728	729	730	731	732	733	734	735
736	737	738	739	740	741	742	743	744	745	746	747
748	749	750	751	752	753	754	755	756	757	758	759
760	761	762	763	764	765	766	767	768	769	770	771
772	773	774	775	776	777	778	779	780	781	782	783
784	785	786	787	788	789	790	791	792	793	794	795
796	797	798	799	800	801	802	803	804	805	806	807
808	809	810	811	812	813	814	815	816	817	818	819
820	821	822	823	824	825	826	827	828	829	830	831
832	833	834	835	836	837	838	839	840	841	842	843
844	845	846	847	848	849	850	851	852	853	854	855
856	857	858	859	860	861	862	863	864	865	866	867
868	869	870	871	872	873	874	875	876	877	878	879
880	881	882	883	884	885	886	887	888	889	890	891
892	893	894	895	896	897	898	899	900	901	902	903

Do not use this card after July 31, 1961.

Name .....
Please print

Your Position .....

School District .....

Address .....

City ..... Zone ..... State .....

No. of pupils in district **7** ☐ 300-600; **6** ☐ 600-1,200; **5** ☐ 1,200-3,000; **4** ☐ 3,000-6,000; **3** ☐ 6,000-12,000; **2** ☐ 12,000-25,000; **1** ☐ OVER 25,000

☐ **Send School Management for one year at $8.00**
☐ **Bill me** ☐ **Bill my district**

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One year ago: Alanna McAllister, age eight.

I GREW 2¼ INCHES"



Today: Alanna 2¼" taller, with desk adjusted to fit her.

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